2022 Implementation Plan Adjustment

Integrated Effects Assessment

Submitted to:

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Report No. 022-0002-01 Rev0

27 July 2022

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1.0 INTRODUCTION

ADEPT Environmental Sciences Ltd. (ADEPT) is pleased to provide Teck Coal Limited (Teck) with the following integrated effects assessment for the 2022 Implementation Plan Adjustment (2022 IPA). The assessment presented herein was conducted to evaluate potential effects to aquatic health associated with projected water quality concentrations in excess of the compliance limits and Site Performance Objectives (SPOs) outlined in *Environmental Management Act* Amended Permit 107517 (1 December 2021).

The integrated effects assessment was conducted using methods developed for the Elk Valley Water Quality Plan (EVWQP) and applied in the 2019 IPA, with updates to reflect more recent refinements to aquatic health assessment tools. In brief,

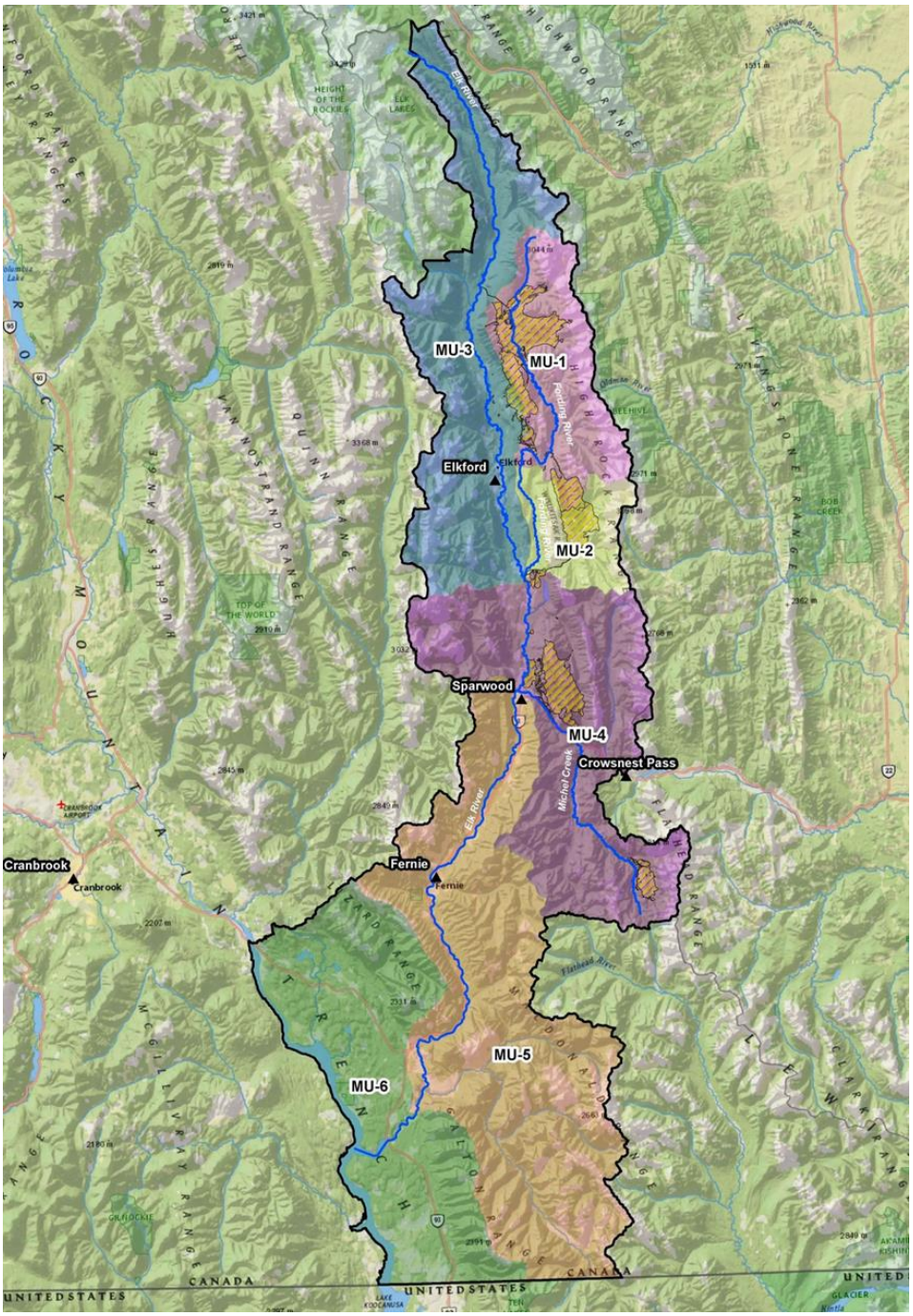
- The assessment used an integrated effects table (IET) approach originally developed for the EVWQP and reported in Annex H (Integrated Assessment Report) of Teck (2014). The IETs for benthic invertebrates, fish, and amphibians[1] were recently updated as part of a program described in Golder (2021a) to progressively reduce uncertainties in Management Question 2 (MQ2) of Teck's Water Quality Adaptive Management Plan (Teck 2018, 2021). MQ2 asks: *Will the aquatic ecosystem be protected by meeting the long-term site performance objectives*? The IETs support answering MQ2 by transparently aggregating model output and ecological effects data in a format used as part of the approved EVWQP. Updated IET methods are discussed in Section 2.1.
- Projected water quality was evaluated for each individual year from 2021 to 2028 and for maximum projected water quality between 2029 and 2053 (hereafter, "assessment periods"). Maximum monthly average 90th percentile (P90) concentrations were assessed for each assessment period because these provide an upper-bound estimate of the level of exposure aquatic organisms are expected to experience; hence, they are effective for use in assessing potential effects to aquatic species related to projected concentrations in excess of the compliance limits and SPOs. Integrated assessments were conducted for nitrate, sulphate, and selenium. An integrated assessment was not conducted for cadmium because projected cadmium concentrations are lower than SPOs and compliance limits. Water quality projections are discussed in Section 2.2.
- Potential effects of nitrate and sulphate were calculated using updated effects information developed as part of the MQ2 program (Golder 2022). Effects equations for sensitive species and life stages of benthic invertebrates, fish, and amphibians were updated in Golder (2022) to incorporate new published and site-specific toxicity information. Golder (2022) also conducted a species sensitivity distribution (SSD) analysis to confirm that the updated effects equations adequately characterize potential effects to the most sensitive species and to refine approaches to characterizing potential effects to benthic invertebrate communities. Methods for the assessment of nitrate and sulphate are discussed in Section 2.3.
- The approach to calculating potential effects of selenium followed that developed for the EVWQP, which involved comparing tissue effects benchmarks for sensitive biota to predictions of selenium bioaccumulation. Golder (2022) confirmed that tissue effects information developed for the EVWQP remains an appropriate basis for evaluating potential effects. However, understanding of how mining affects selenium bioaccumulation has advanced since the EVWQP. The tools used to predict bioaccumulation were updated to incorporate that understanding by explicitly considering the effect of selenium speciation. Methods for the assessment of selenium are discussed in Section 2.4.

[1] Additional IETs were developed in the EVWQP to evaluate potential effects of selenium on aquatic-feeding birds. These IETs were not updated in Golder (2021a) because previous evaluations for the EVWQP and 2019 IPA have found that fish consistently provide a more sensitive evaluation of potential effects of selenium.

- Spatially integrated results for projected concentrations of each constituent in each assessment period were summarized for comparison to area-based assessment criteria developed for the EVWQP and applied in the 2019 IPA. As in the EVWQP and 2019 IPA, spatially integrated results were calculated at a Management Unit (MU) level (Figure 1). Assessment criteria were applied to each MU in each assessment period. Assessment criteria are discussed in Section 2.5.

Results of the integrated assessment are provided in Section 3 and key findings are summarized in Section 4. Uncertainties in the assessment are discussed in Section 5.

Figure 1: Management Units of the Elk Valley (Teck 2014)



2.0 METHODS

2.1 Integrated Effects Tables

IETs were originally developed for the EVWQP (Teck 2014) as a tool to spatially aggregate assessment results in support of area based management. The IETs divide each MU into spatial subunits to evaluate potential effects of projected water quality in segments of mainstem rivers, mine-influenced tributaries, non-mine influenced (reference) tributaries, and associated off-channel habitats. Tributaries that are likely to be ephemeral and not influenced by mining were not included in the integrated assessment because quality of aquatic habitat in these areas is expected to be low and their inclusion would bias the influence of reference tributaries in the assessment. Upstream tributary areas that are isolated from the Fording or Elk River mainstems, such as those in upper Kilmarnock Creek, were not incorporated into the integrated assessment because they are not accessible to fish in the river mainstems, nor would they be a source of benthic drift to downstream areas. Excluding these areas avoided dilution of spatially integrated effects through inclusion of unconnected reference areas. All other mine-affected and connected reference areas were included as subunits in the IETs.

The delineation of spatial subunits in each MU was recently updated in Golder (2021a) to better align with biological monitoring locations and thereby facilitate comparison of projections to monitoring data summarized in the Aquatic Data Integration Tool (ADIT; Golder 2020a). As discussed in Golder (2021a), the updated IETs include all connected lotic (flowing-water) habitat in MUs 1 through 5, which comprises the great majority of aquatic habitat in the Elk Valley and the areas of the watershed exposed to mine-affected water quality. Lentic areas are not currently included in the IETs because existing water quality models do not provide predictions for these areas. The current IET approach therefore focuses on lotic areas, which aligns with the current state of the ADIT. Inclusion of lentic areas in the ADIT is limited by differences between lotic and lentic areas in species assemblages, exposure to potential stressors, and monitoring programs, some of which are still under development. As a result of these differences, lentic habitats require different monitoring and interpretive tools from lotic habitats. Incorporation of lentic areas into the ADIT is under development in co-ordination with development of lentic monitoring programs. The assessment herein applies the updated IETs prepared by Golder (2021a), and therefore focuses on lotic areas. The IETs evaluate potential effects to both sensitive lotic species (benthic invertebrates and fish) and sensitive lentic species (amphibians), and therefore assume that assessing the distribution of exposures in lotic areas provides a reasonable basis for assessing overall conditions across each MU, including lentic areas where present. This approach is expected to be reasonable for nitrate and sulphate and to represent a relatively small uncertainty for selenium because of the predominance of lotic habitat in all MUs. Uncertainty associated with exposure in lentic areas in discussed in Section 5.

In the process of updating spatial subunits in the IETs, Golder (2021a) also implemented updated information on total and fish-accessible habitat in all MUs and proportional fish use in MU1. Habitat area and fish accessibility information was developed by Ecofish Research Ltd. (Ecofish 2020) using a basin-level regression model fit to records from the BC Stream Inventory Sample Site in the Elk Valley. Fish use information was calculated by Teck from data reported in Cope et al. (2016) for adults in winter, spring, and summer-fall and redds in spring, reflecting the seasonality of spatial distribution of fish in this area. Based on input from Ecofish, information collected by Cope et al. (2016) was interpreted at a spatial scale of 11 river segments in the upper Fording River. Percent fish usage in each subunit of the IET was then estimated by apportioning the fish use of each segment across the subunits within that segment, proportional to the relative size of each subunit in terms of fish accessible habitat. Both area-weighted and use-weighted calculations of integrated effects to fish in MU1 are evaluated herein.

The EVWQP did not include an integrated effects table for Koocanusa Reservoir (MU6) because long-term targets for the reservoir were set at BC WQGs and were projected to be attained. An assessment of the modelling

node in Koocanusa Reservoir (RG_DSELK) was added to the 2019 IPA to evaluate projected concentrations of selenium that were greater than the BC WQG. The same approach was taken herein. As in the 2019 IPA, projected concentrations of nitrate and sulphate in Koocanusa Reservoir were below BC WQGs and therefore did not warrant further assessment.

2.2 Water Quality Projections

Projected concentrations of nitrate, sulphate, selenium, and hardness (for the calculation of nitrate effects) were obtained from the water quality modelling analysis described in Section 2.2 of the 2022 IPA main report. Constituent concentrations in tributaries and other subunits unaffected by mining were set to average reference conditions and were assumed to remain unchanged over time, consistent with the approach used in the EVWQP and 2019 IPA. Constituent concentrations in other subunits were projected using the 2020 Regional Water Quality Model, as described in Section 2.2 of the 2022 IPA main report. Projected water quality was evaluated as maximum monthly P90 concentrations for each individual year from 2021 to 2028 and for the maximum monthly P90 concentration between 2029 and 2053.

Because not all subunits in the updated IETs contain a RWQM modelling node, projected water quality in some subunits was estimated from adjacent subunits. This estimation was conducted to maximize the amount of habitat in each MU that could be assessed and included in the spatially integrated effects calculation. In most cases, water quality was assumed to be the same as the nearest upstream subunit with a modelling node. This extrapolation assumes that there are no material sources of dilution or material inputs of mine-related constituents between the subunits in question. The former assumption may in some areas result in an over-estimation of projected water quality. The latter assumption is expected to be reasonable in most areas, given that the RWQM was designed to model all material inputs of mine-related constituents (i.e., if a material input was present, a modelling node would have been placed there). In a few cases, it was estimated that the nearest downstream subunit with a modelling node would provide a more reliable estimate of projected water quality.[2]

In the EVWQP IETs, potential effects were calculated for the most sensitive species and life stages using projected water quality in any month, regardless of whether the most sensitive life stages are present at the time when peak projected water quality occurs. The IETs were subsequently updated in the 2019 IPA to consider water quality in relevant seasons for each receptor. This update reflects the understanding that exposure windows vary by constituent, receptor, life stage, and MU. Use of a single maximum monthly concentration has the potential to introduce false positives, in that potential effects could be predicted because peak projected water quality occurs when the most sensitive life stage or receptor is not present. To reduce the potential for such false positives, the updated IETs considered the seasonality of the receptor pathway. This approach is consistent with Environment Canada (2012) Ecological Risk Assessment guidance that states that “[e]valuation of the use of the site should take into account seasonality as some potential receptors may only use the site for a portion of their life cycle”. In alignment with this principle, projected concentrations were assessed for the months during which the receptor or relevant sensitive life stage would be exposed, as summarized in Table 1.

[2] Subunits for which water quality was estimated from the nearest downstream subunit were Michel Creek downstream of Bodie Creek (biological monitoring station MIDBO, estimated from MICOMP), Grave Creek downstream of Harmer Creek (GRCK, estimated from GRDS), Greenhills Creek upstream of Greenhills Sedimentation Pond (GHCKU, estimated from GHCKD), and the Fording River upstream of Line Creek (FRUL, estimated from FO23).

Table 1: Assessment Windows (Table 1 of Annex I, 2019 IPA [Golder 2019a])

Receptor	Constituent	Assessment Window	Rationale
Invertebrates	Nitrate, Sulphate, Selenium	All months	Invertebrates are present year-around.
Fish	Nitrate, Sulphate	MU1: May to August (early life stages), all months (other life stages) MU2 to MU6: all months	Fish benchmarks are based on effects to embryos and alevins of sensitive fish species; assessment windows align with when early life stages could be present. Additional chronic benchmarks will be developed in Task 8 using toxicity testing data for juveniles and/or adults so that potential effects to fish can be evaluated using relevant benchmarks in all months. In MU1, WCT is the only fish species present. Early life stages of WCT are present from mid May to August. In other MUs, there are fish species with different spawning windows; early life stages could be present in any month.
	Selenium	All months	Timing of egg provisioning (when selenium is bioaccumulated) has not been sufficiently characterized to define an exposure window for reproductive effects. Growth of juvenile fish was assumed to occur in all months. Therefore, all months were considered potentially relevant to exposure of fish.
Amphibians	Nitrate, Sulphate, Selenium	April to August	Amphibians in the Elk Valley are spring spawners. Sensitive early life stages are present from spawning until metamorphosis, which occurs in summer.

Notes: IPA = Implementation Plan Adjustment; MU = management unit; WCT = westslope cutthroat trout. For fish in MU1, the month range is from the fish periodicity table for the upper Fording River (mid May to August), which is an expanded window relative to the 2019 IPA (June to August). As noted in Section 1, aquatic-feeding birds were not included in the present analysis because updated IETs are not available, but this is not expected to result in under-estimation of effects because fish have been found to provide a more sensitive evaluation of selenium than birds.

Maximum projected monthly average concentrations were identified independently for each subunit and assessment window, and were not temporally consistent across the MU within the time period of interest. For example, maximum concentrations in one subunit between January and December may be projected to occur in March while those in a different subunit may be projected to occur in August. These temporally disconnected results were combined in a single integrated effects assessment table to enable an assessment of integrated effects across the MU in question for each assessment period. This approach was used to constrain the number of assessment tables considered in the analysis, while at the same time minimizing the risk of under-estimating projected effects of projected concentrations in excess of compliance limits and SPOs.

2.3 Assessment of Nitrate and Sulphate

Potential effects of nitrate and sulphate were evaluated using updated effects information developed in Golder (2022) and implemented in the IETs in Golder (2021a) as part of the MQ2 program. Updated concentration-response models for sensitive invertebrates, fish, and amphibians were derived using an updated compilation of site-specific and literature laboratory toxicity data, including data available at the time of the EVWQP and subsequent to the EVWQP. Updated SSDs were also derived to evaluate updated effects concentrations for sensitive species relative to the distribution of sensitivity of other species. The analysis in Golder (2022) indicated the following:

- EVWQP benchmarks for effects of nitrate and sulphate on sensitive early life stages of fish were updated using site-specific testing conducted after the EVWQP. The evaluation confirmed that rainbow trout (*Oncorhynchus mykiss*) remains an appropriately sensitive species for development of fish benchmarks for both constituents. Updated effect concentrations were concluded to give an improved understanding of the concentration-response relationships for fish exposed to nitrate and sulphate in the Elk Valley.

- EVWQP benchmarks for effects of nitrate on sensitive invertebrates overpredicted effects in some site-specific testing conducted after the EVWQP. The evaluation confirmed that *C. dubia* remains an appropriately sensitive species for development of invertebrate benchmarks. Updated effect concentrations were concluded to give an improved and more reliable understanding of the concentration-response relationship for invertebrates exposed to nitrate in the Elk Valley.
- EVWQP benchmarks for effects of sulphate on sensitive invertebrates were updated using site-specific testing conducted after the EVWQP. The evaluation confirmed that *C. dubia* is an appropriately sensitive species for development of benchmarks, but also found that the tested mayfly species was similarly sensitive. The incorporation of additional recent site-specific *C. dubia* reproduction data resulted in a reversal in the ranked sensitivity of *C. dubia* and the mayfly *Neocloeon triangulifer*, such that the latter was, by a small margin, the most sensitive organism to sulphate exposures. Comparisons between *C. dubia* and mayfly datasets and concentration-response models used to derive updated effect concentrations alongside the EVWQP concentration-response models indicated that both species exhibited broadly similar sensitivity to sulphate. The available data do not provide a definitive basis for concluding that either organism is more sensitive than the other. Updated effect concentrations were calculated by Golder for both species and the more sensitive was adopted for the present analysis.
- EVWQP benchmarks for effects of nitrate and sulphate on amphibians were updated using site-specific testing conducted after the EVWQP. The evaluation confirmed that Northern leopard frog (*Lithobates pipiens*) remains an appropriately sensitive species for development of amphibian benchmarks. The evaluation concluded that more recent site-specific testing indicated similar sensitivity to sulphate but greater sensitivity to nitrate relative to the literature studies considered in the EVWQP. Updated effect concentrations were concluded to give an improved and more reliable understanding of the concentration-response relationship for amphibians exposed to nitrate and sulphate in the Elk Valley. For both nitrate and sulphate, Golder (2022) noted that estimated 10% effects concentrations for larval amphibian growth were interpolated within the no-effect concentration range and concluded that the updated concentration-response functions likely overestimate effects in this range. The analysis indicated that 20% effects concentrations provided a more reliable indication of potential effects.

The updated IETs prepared by Golder (2021a) implemented the updated toxicity information summarized above to calculate predicted effects to sensitive fish, benthic invertebrate, and amphibian species. This approach is consistent with the approach used in the EVWQP and is supported by the analysis in Golder (2022), which concluded that the updated toxicity relationships, by incorporating more information than was available at the time of the EVWQP, would provide improved and more reliable predictions of potential effects.

The updated IETs prepared by Golder (2021a) also implemented refinements to the calculation of the benthic invertebrate community endpoint. In the EVWQP, potential effects to benthic invertebrate communities (i.e., beyond the most sensitive species, with a greater potential to result in shifts in community structure) were evaluated using toxicity information for the second-most sensitive invertebrate species. The analysis in Golder (2022) provided a more informative basis for this evaluation in the form of updated SSDs. The updated toxicity compilation for nitrate contained sufficient information to develop an invertebrate-only SSD. Golder (2021a) implemented this invertebrate-only SSD to calculate the proportion of invertebrate species that could potentially be affected by nitrate. The updated toxicity compilation for sulphate did not contain sufficient information to develop an invertebrate-only SSD, but Golder (2022) noted a close overlap between the all-species SSD and the concentration-response curves for sensitive species (*N. triangulifer* and *C. dubia*), which indicates that increasing magnitude of effects to sensitive species also indicates potential effects to an increasing proportion of species. Following this logic, Golder (2021a) implemented the sensitive species concentration-response curve to calculate the proportion of benthic invertebrate species that could potentially be affected by sulphate.

Updates to nitrate and sulphate effects calculations in the IETs are summarized in Table 2.

Table 2: Updates to Effects Calculations in Integrated Effects Tables

Endpoint	EVWQP Approach	Updated Approach
Benthic Invertebrates		
Sensitive species	Estimate potential effects to the most sensitive species	Estimate potential effects to the most sensitive species using updated equations per results of MQ2 (Golder 2022)
Community	Apply rating based on potential effects to the most sensitive species and second most sensitive species	Estimate proportion of invertebrate species potentially affected using a species sensitivity distribution (nitrate) or approximated using predicted effects on sensitive species (sulphate)
Fish and Amphibians		
Direct effects to sensitive species	Estimate potential effects to the most sensitive species	Estimate potential effects to the most sensitive species using updated equations per results of MQ2 (Golder 2022)

2.4 Assessment of Selenium

Potential effects of selenium were calculated by combining tissue effects information for sensitive biota with predictions of selenium bioaccumulation. The approach was the same as that used in the EVWQP and 2019 IPA, with refinements as described below.

Studies of selenium toxicity conducted after the EVWQP have confirmed that tissue effects information developed for the EVWQP remains an appropriate basis for evaluating potential effects to sensitive species and life stages of aquatic life. Golder (2022) conducted an updated review of selenium toxicity literature and concluded that relevant and reliable selenium toxicity studies conducted after the EVWQP reported effects concentrations higher than those adopted as tissue benchmarks for the EVWQP. Therefore, the analysis herein applied the EVWQP tissue benchmarks (for benthic invertebrate reproduction) and concentration-response relationships (for fish reproduction).

In contrast, studies of selenium bioaccumulation conducted after the EVWQP have provided a refined understanding of how mining affects selenium bioaccumulation (Golder 2021b; ADEPT 2022). Specifically, these studies have found that most lotic areas in the Elk Valley exhibit a pattern of selenium bioaccumulation that can be attributed to the inorganic selenium species selenate (the dominant species) and selenite (typically present as about 1% of total selenium). Localized effects on selenium bioaccumulation immediately downstream of sedimentation ponds and the West Line Creek Active Water Treatment Facility (AWTF) have been attributed to the presence of the organoselenium species dimethylselenoxide and methylseleninic acid.

The refined understanding of how speciation affects bioaccumulation has been used to develop updated models to predict bioaccumulation. Golder (2020b) updated the statistical bioaccumulation models originally developed for the EVWQP to describe the prevailing pattern of bioaccumulation in lotic areas not affected by organoselenium (i.e., the majority of aquatic habitat in the Elk Valley). The updated lotic model derived by Golder (2020b) provided improved model performance for such areas relative to the EVWQP bioaccumulation model. In areas affected by organoselenium, more accurate predictions of bioaccumulation are provided by the speciation bioaccumulation model developed by de Bruyn and Luoma (2021). Golder (2021b) showed that sites with <0.025 µg/L organoselenium (as the sum of dimethylselenoxide and methylseleninic acid) conformed to the Golder (2020b) updated lotic model, whereas sites with ≥0.025 µg/L organoselenium tended to exhibit higher bioaccumulation than predicted by the updated lotic model, and should be evaluated using the de Bruyn and Luoma (2021) model.

The assessment herein implemented the updated bioaccumulation models as follows:

- Projected maximum monthly selenium concentrations at all modelling locations were translated into tissue selenium concentrations using the updated lotic bioaccumulation model (Golder 2020b). This approach is the same as that used in the EVWQP, with the exception of using an updated model that is specific to areas unaffected by organoselenium. This calculation gives tissue selenium concentrations predicted to result from exposure to projected maximum monthly aqueous selenium concentrations, but does not account for localized effects of organoselenium.
- Spatial patterns of organoselenium in each MU were characterized using the maximum organoselenium concentration reported at each monitoring location in 2021. These organoselenium concentrations were compiled by ADEPT (2022) and were available for most mine-affected subunits in the IET. Missing values were replaced with the higher of the nearest upstream or downstream subunits; this extrapolation was applied to two subunits on the Fording River, two on the Elk River, and one on Grave Creek. Organoselenium concentrations in unaffected subunits were assumed to be negligible.
- The influence of organoselenium on bioaccumulation was calculated using the de Bruyn and Luoma (2021) model for each subunit. This calculation gives the incremental increase in tissue selenium concentrations predicted to result from exposure to the maximum 2021 reported organoselenium concentration for each subunit.
- The incremental increase calculated by the de Bruyn and Luoma (2021) model was added to the result of the Golder (2020b) model to give a predicted tissue selenium concentration that reflects both inorganic selenium species and organoselenium. The sum of these two terms was adopted as the estimated benthic invertebrate tissue selenium concentration for each subunit in each assessment period.

The approach outlined above allowed the assessment to consider projected future changes in aqueous total selenium concentrations from the RWQM, while also explicitly accounting for localized effects of organoselenium. It was necessary for this assessment to assume that the spatial pattern and magnitude of organoselenium concentrations measured in 2021 would provide a reasonable approximation of future organoselenium concentrations. This assumption was necessary because tools do not currently exist to project future changes to organoselenium concentrations. As discussed by ADEPT (2022), the processes that result in organoselenium generation are complex and not fully understood, and also appear to be highly site-specific, occurring to varying degrees in different areas such as downstream of some sedimentation ponds. Uncertainty associated with this assumption is discussed in Section 5.

As in the 2019 IPA, the assessment of selenium in Koocanusa Reservoir (MU6) considered that a range of lotic and lentic conditions may exist in this area. Analyses conducted by Golder (2018) indicated that zooplankton, benthic invertebrate, and fish selenium concentrations collected in Koocanusa Reservoir conform to the EVWQP bioaccumulation model for lotic areas. However, it has not been ruled out that some portions of the reservoir may exhibit lentic bioaccumulation conditions. To evaluate this possible range of conditions, peak projected selenium concentrations at RG_DSELK were translated into modelled benthic invertebrate selenium concentrations using the update lotic (as in other MUs) and lentic bioaccumulation models derived by Golder (2020b). Results from the two models were considered to represent the range of possible conditions at different locations in the reservoir.

Benthic invertebrate tissue selenium concentrations calculated following the approaches outlined above were evaluated by comparing to EVWQP benchmarks for invertebrates and juvenile fish. Fish egg selenium concentrations were calculated using the invertebrate to fish eggs trophic transfer model from the EVWQP (Section 3.2 in Annex E of Teck 2014) and were then used to calculate potential effects on fish reproduction using concentration-response relationships from the EVWQP (Section 3.1 in Annex E of Teck 2014). As in the EVWQP,

the concentration-response relationship for WCT (*Oncorhynchus clarkii lewisi*) was used in the upper Fording River (MU1) and the concentration-response relationship for brown trout (*Salmo trutta*) was used in all other MUs as a surrogate for other potentially sensitive fish species. The approach herein differed from that in the EVWQP by directly applying modelled estimates of exposure and potential effects in each subunit (using the refined assessment tools described above), rather than using the selenium effects curves developed for the EVWQP. Uncertainty associated with this difference in approaches is discussed in Section 5.

Amphibians were not specifically assessed for selenium in the EVWQP or 2019 IPA because sufficient information was not available to reliably predict and evaluate tissue selenium concentrations. The updated toxicity literature review conducted by Golder (2022) also did not identify any relevant and reliable toxicity information for amphibians. The EVWQP concluded that predicted selenium effects on fish would likely provide a conservative assessment for amphibians, and that approach was taken herein.

2.5 Assessment Criteria

Spatially integrated results from the IETs were evaluated relative to assessment criteria developed for the EVWQP and applied in the 2019 IPA. As in the EVWQP and 2019 IPA, spatially integrated results were calculated separately for each MU and assessment criteria were applied to each MU in each assessment period.

Potential effects expressed as a percentage were spatially integrated using an area-weighted approach to identify the percent effect across the entire MU (e.g., a 5% predicted integrated effect of nitrate on *C. dubia* reproduction across MU1). The spatial integration assumed that all habitat is of equal value and receives equal use. The calculation involved multiplying the percent effect in each subunit by the habitat present in the subunit, adding all of the resulting values, and then dividing by the total habitat available in the MU. In the upper Fording River (MU1), a supplemental spatial integration for fish was conducted weighted by relative use of different areas by fish, which was characterized as discussed in Section 2.1. In Koocanusa Reservoir (MU6), conditions throughout the MU were assumed to be represented by projected water quality at RG_DSELK.

Spatially integrated values were compared to critical effect sizes of 10 and 20% to assess protection of aquatic life. A critical effect size is a level of effect, defined on the basis of controlled laboratory experiments of sublethal effects to sensitive test species, below which changes to populations or communities of sensitive aquatic species in the environment are not expected to occur. The US EPA identifies 20% as a critical effect size for most cases. It represents an effect on laboratory organisms that is sometimes statistically distinct from reference or control conditions but that is not expected to cause meaningful and measurable changes in a natural population (US EPA 1999, 2013). Suter et al. (1995) also use a critical effect size of 20% but acknowledge that the minimum detectable effect varies by species, habitat and sampling method. For mobile species, they conclude that a difference of less than 20% can seldom be reliably detected and represent a *de minimis* effects level. A USGS study by Mebane (2010) similarly identifies a 20% critical effect size for benthic invertebrates in any environment and for fish when exposed to a single stressor, although they suggest a smaller effect size of 10% for fish when multiple stressors are present.

Based on the above and consistent with the approach used in the EVWQP and the 2019 IPA, potential effects on sensitive aquatic receptors in each subunit were first assessed as follows. Concentrations of selenium, sulphate, and nitrate were evaluated using concentration-response curves where available. Where a concentration-response curve was not available (i.e., for evaluating potential effects of selenium on invertebrates), concentrations were compared to level 1 benchmarks representing a 10% effect size and to level 2 benchmarks representing a 20% effect size. Results of the comparison were expressed either as a percentage potential effect

on the receptor organism and most sensitive life-history endpoint (e.g., an 8% effect on *C. dubia* reproduction) or as a categorical result (e.g., <level 1 benchmark).

The evaluation of integrated effects applied the following integrated effects assessment criteria, which are derived from the corresponding critical effect sizes:

For the protection of benthic invertebrate community structure and abundance:

- a predicted integrated effect size of <20% to the benthic invertebrate community endpoint across the MU (if concentration-response information is available)
- a predicted effect size of <20% in all mainstem subunits of the Elk and Fording rivers (if concentration-response information is available) or concentrations less than the level 2 benthic invertebrate community benchmark (if not)

For the protection of fish and amphibian populations:

- a predicted integrated effect size of <10% across the MU for the most sensitive fish or amphibian life-history endpoint
- a predicted effect size of <10% in all mainstem subunits of the Elk and Fording rivers

Benthic invertebrate criteria focused on maintaining effect sizes <20% for the most sensitive species and life-history endpoint because Suter et al. (1995), Mebane (2010) and US EPA (1999, 2013) suggest that these will be protective and prevent measurable and ecologically meaningful changes to benthic invertebrate communities. Lower effect sizes were used for fish and amphibians in recognition of the analysis of Mebane (2010), which indicated that effect sizes of 10% are recommended for fish when multiple stressors are present.

If all integrated assessment criteria were met, then predicted conditions are expected to be protective of aquatic health in the MU. Exceeding one or more of these integrated assessment criteria for an MU does not necessarily mean that aquatic health would not be protected; however, it does require consideration of any such exceedances to evaluate the level of risk.

3.0 RESULTS

3.1 Nitrate

Integrated assessment results for nitrate are summarized in Table 3 (benthic invertebrates), Table 4 (fish), and Table 5 (amphibians). IETs are provided in Appendix A.

Table 3. Integrated Assessment Results for Nitrate Effects on Benthic Invertebrates

Assessment Period	Integrated Effect on Community Endpoint					Proportion of Mainstem <L2 Community Effect				
	MU1	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	4%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2022	3%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2023	3%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2024	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2025	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2026	1%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2027	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2028	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2029-2053	0%	0%	0%	0%	0%	100%	100%	100%	100%	100%

Table 4. Integrated Assessment Results for Nitrate Effects on Fish

Assessment Period	Integrated Effect on Most Sensitive Endpoint					Proportion of Mainstem <10% Effect				
	MU1[(a)]	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2% / 6%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2022	2% / 5%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2023	0% / 1%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2024	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2025	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2026	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2027	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2028	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2029-2053	0% / 0%	0%	0%	0%	0%	100%	100%	100%	100%	100%

[(a)] Results for MU1 are shown weighted by area (first value) and by fish use (second value)

Table 5. Integrated Assessment Results for Nitrate Effects on Amphibians

Assessment Period	Integrated Effect on Most Sensitive Endpoint					Proportion of Mainstem <10% Effect				
	MU1	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2022	2%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2023	2%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2024	1%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2025	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2026	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2027	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2028	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2029-2053	1%	1%	0%	0%	0%	100%	100%	100%	100%	100%

Assessment criteria were met for benthic invertebrates, fish, and amphibians in all years across all five MUs. These results are consistent with the 2019 IPA.

The effect of incorporating fish use information into the IET in MU1 was to increase the predicted integrated effect of nitrate in 2021, 2022, and 2023. This increase was related to the higher estimated use of LCO Dry Creek for spawning (about 6% of total fish spawning in MU1) relative to the area of LCO Dry Creek (about 2% of total fish accessible habitat in MU1). Projected nitrate concentrations in LCO Dry Creek in 2021 and 2022 were relatively high, and the relatively higher weighting given to this area in the fish use calculation resulted in higher spatially integrated effects. After 2022, projected nitrate concentrations in this area decline and the fish use integration was no longer as markedly distinct from the area weighted integration.

3.2 Sulphate

Integrated assessment results for sulphate are summarized in Table 6 (benthic invertebrates), Table 7 (fish), and Table 8 (amphibians). IETs are provided in Appendix A.

Table 6. Integrated Assessment Results for Sulphate Effects on Benthic Invertebrates

Assessment Period	Integrated Effect on Community Endpoint					Proportion of Mainstem <L2 Community Effect				
	MU1	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2022	2%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2023	2%	0%	0%	0%	0%	100%	100%	100%	100%	100%
2024	2%	0%	0%	1%	0%	100%	100%	100%	100%	100%
2025	2%	0%	0%	1%	0%	100%	100%	100%	100%	100%
2026	2%	0%	0%	1%	0%	100%	100%	100%	100%	100%
2027	2%	0%	0%	1%	0%	100%	100%	100%	100%	100%
2028	2%	0%	0%	1%	0%	100%	100%	100%	100%	100%
2029-2053	2%	0%	0%	2%	0%	100%	100%	100%	100%	100%

Table 7. Integrated Assessment Results for Sulphate Effects on Fish

Assessment Period	Integrated Effect on Most Sensitive Endpoint					Proportion of Mainstem <10% Effect				
	MU1[(a)]	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2% / 3%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2022	2% / 3%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2023	2% / 3%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2024	2% / 3%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2025	3% / 4%	2%	0%	1%	0%	100%	100%	100%	100%	100%
2026	3% / 4%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2027	2% / 3%	1%	0%	1%	0%	100%	100%	100%	100%	100%
2028	2% / 3%	2%	0%	1%	0%	100%	100%	100%	100%	100%
2029-2053	3% / 5%	2%	0%	1%	0%	100%	100%	100%	100%	100%

[(a)] Results for MU1 are shown weighted by area (first value) and by fish use (second value)

Table 8. Integrated Assessment Results for Sulphate Effects on Amphibians

Assessment Period	Integrated Effect on Most Sensitive Endpoint					Proportion of Mainstem <10% Effect[(a)]				
	MU1	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2022	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2023	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2024	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2025	2%	2%	0%	0%	0%	100%	100%	100%	100%	100%
2026	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2027	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2028	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%
2029-2053	2%	1%	0%	0%	0%	100%	100%	100%	100%	100%

Assessment criteria were met for benthic invertebrates, fish, and amphibians in all years across all five MUs. These results are consistent with the 2019 IPA.

The effect of incorporating fish use information into the spatial integration in MU1 was a small increase in the predicted integrated effect of sulphate in all assessment periods, reflecting a slightly different weighting of subunits relative to the area based calculation. There was no single subunit that had a relatively large influence on the calculation (as was identified for nitrate).

3.3 Selenium

Integrated assessment results for selenium are summarized in Table 9 (benthic invertebrates) and Table 10 (fish). IETs are provided in Appendix A.

Table 9. Integrated Assessment Results for Selenium Effects on Benthic Invertebrates

Assessment Period	Integrated Effect on Community Endpoint					Proportion of Mainstem <L2 Community Effect				
	MU1	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2022	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2023	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2024	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2025	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2026	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2027	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2028	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%
2029-2053	nc	nc	nc	nc	nc	100%	100%	100%	100%	100%

nc = not calculated because effect not expressed as percentage

Table 10. Integrated Assessment Results for Selenium Effects on Fish

Assessment Period	Integrated Effect on Most Sensitive Endpoint					Proportion of Mainstem <10% Effect				
	MU1[(a)]	MU2	MU3	MU4	MU5	MU1	MU2	MU3	MU4	MU5
2021	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2022	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2023	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2024	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2025	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2026	2% / 0%	5%	2%	2%	2%	100%	100%	100%	100%	100%
2027	2% / 0%	4%	2%	2%	2%	100%	100%	100%	100%	100%
2028	2% / 0%	4%	2%	2%	2%	100%	100%	100%	100%	100%
2029-2053	2% / 0%	4%	2%	2%	2%	100%	100%	100%	100%	100%

[(a)] Results for MU1 are shown weighted by area (first value) and by fish use (second value)

Assessment criteria were met for benthic invertebrates and fish in all assessment periods across MUs 1 through 5. These results are consistent with or improved relative to the 2019 IPA.

The effect of incorporating fish use information into the spatial integration in MU1 was a small decrease in the predicted integrated effect of selenium in all model years. This change reflects relatively low estimated use by adult fish of mine-affected tributaries, and therefore relatively low estimated exposure to the benthic invertebrate selenium concentrations that occur immediately downstream of some sedimentation ponds.

Assessment results for selenium in Koocanusa Reservoir (MU6 at RG_DSELK) are summarized in Table 11.

Table 11. Assessment Results for Selenium Effects in Koocanusa Reservoir (MU6)

Assessment Period	Projected Total [Se] (µg/L)	Modelled BI [Se] (mg/kg dw)	Modelled Fish Egg [Se] (mg/kg dw)	Predicted Effect on Invertebrates		Predicted Effect on Sensitive Fish Species	
				Sensitive Species Endpoint	Community Endpoint	Reproduction	Juvenile Growth
2021	2.9	5.7 / 10.7	11.0 / 18.2	<L1 / <L1	<L1 / <L1	2% / 11%	3% / 10%
2022	2.8	5.6 / 10.6	11.0 / 17.9	<L1 / <L1	<L1 / <L1	2% / 11%	3% / 9%
2023	2.5	5.6 / 10.1	11.0 / 17.0	<L1 / <L1	<L1 / <L1	2% / 9%	2% / 8%
2024	2.3	5.6 / 9.8	10.9 / 16.4	<L1 / <L1	<L1 / <L1	2% / 8%	2% / 8%
2025	2.3	5.6 / 9.8	10.9 / 16.4	<L1 / <L1	<L1 / <L1	2% / 8%	2% / 8%
2026	2.2	5.6 / 9.6	10.9 / 16.1	<L1 / <L1	<L1 / <L1	2% / 7%	2% / 8%
2027	2.2	5.6 / 9.6	10.9 / 16.1	<L1 / <L1	<L1 / <L1	2% / 7%	2% / 8%
2028	1.9	5.5 / 9.1	10.9 / 15.1	<L1 / <L1	<L1 / <L1	2% / 6%	2% / 7%
2029-2053	1.9	5.5 / 9.1	10.9 / 15.1	<L1 / <L1	<L1 / <L1	2% / 6%	2% / 7%

Model results are shown for assumed lotic bioaccumulation conditions (first value) and lentic bioaccumulation conditions (second value); [Se] = selenium concentration; BI = benthic invertebrate; L1 = level 1 benchmark

As discussed in Section 2.5, projected water quality at RG_DSELK was used to evaluate potential effects on invertebrates and fish in Koocanusa Reservoir, applying the same assessment criteria as in other MUs (<10% predicted effect on the most sensitive fish endpoint; <20% predicted effect on the invertebrate community endpoint). Assessment criteria in Koocanusa Reservoir were met for benthic invertebrates in all years and for fish in all assessment periods (assuming lotic bioaccumulation conditions) or after 2022 (assuming lentic bioaccumulation conditions). Considering that the analysis of Golder (2018) indicated that available data from Koocanusa Reservoir conform to the lotic bioaccumulation model, it is expected that integrated conditions across MU6 in all assessment periods would meet assessment criteria for fish comparable to those applied to the other MUs.

4.0 SUMMARY OF KEY FINDINGS

The objective of this analysis was to evaluate projected water quality greater than compliance limits and SPOs. Constituent-specific assessments were conducted using the same approach used in the 2019 IPA, with refinements to incorporate updated aquatic health assessment tools as described in Section 2. The interpretation summarized below considers that the assessment criteria applied in this analysis were derived in the EVWQP to reflect attainment of area-based protection goals for aquatic health. Where assessment criteria are met, those protection goals are considered to have been attained.

Key findings of the integrated assessment are:

- Nitrate – Assessment criteria were met for benthic invertebrates, fish, and amphibians for all assessment periods (2021-2053) in all assessed MUs (1-5).
- Sulphate – Assessment criteria were met for benthic invertebrates, fish, and amphibians for all assessment periods (2021-2053) in all assessed MUs (1-5).
- Selenium – Assessment criteria were met for benthic invertebrates, fish, and amphibians for all assessment periods (2021-2053) in all assessed MUs (1-6).

Based on the above results, projected water quality conditions as presented in the 2022 IPA are expected to be protective of aquatic health in the MUs.

5.0 UNCERTAINTY

Key areas of uncertainty in the integrated effects assessment, and steps taken to evaluate and manage uncertainty, are discussed below.

Incorporation of refined assessment tools to reduce uncertainty

The IEA update incorporates a number of learnings since the last update, which has reduced uncertainty in the assessment in the following ways:

- Improved understanding of the influence of organoselenium on bioaccumulation has reduced model variability. Sites influenced by organoselenium can be modelled separately from sites that are not influenced by organoselenium species, which reduces model variability and corresponding uncertainty that was associated with trying to model all sites with a single model. Using the refined approach, sites not influenced by organoselenium have lower modelled tissue concentrations compared to the EVWQP bioaccumulation model, whereas sites influenced by organoselenium have generally higher concentrations. In both cases, the updated modelling approach provides a better match to measured values compared to the previous approach (Golder 2020b; de Bruyn and Luoma 2021).
- Reduced variability in modelled bioaccumulation has allowed for simplification in estimation of percent effects to fish in each subunit. The relatively high variability in modelled selenium tissue concentrations resulting from the single bioaccumulation model used in the EVWQP warranted a complex approach to calculate effects in a way that integrated across that expected variability in exposure. With the lower residual variability associated with the updated approach to modelling bioaccumulation, the methodology could be simplified to a calculation of percent effects associated with mean modelled tissue concentrations. This change in methodology is also supported by analyses conducted as a follow-up to the 2019 IPA (Golder 2019b). Specifically, Golder (2019b) concluded that modelled mean fish egg selenium concentrations tend to over-estimate the distribution of measured concentrations in MU1. The modelled (wide) variability around the modelled mean egg selenium concentrations (as assumed in the EVWQP effects calculation) was not observed in measured data.
- Updated concentration response relationships for calculating effects of nitrate and sulphate on benthic invertebrates, fish, and amphibians were developed under a program to progressively reduce uncertainties in MQ2 of Teck's Water Quality Adaptive Management Plan (Golder 2022). Effects equations for sensitive species and life stages were updated in Golder (2022) to incorporate new published and site-specific toxicity information, in combination with the information that was available at the time benchmarks were derived for the EVWQP. Golder (2022) also conducted an updated SSD analysis to confirm that the updated concentration response relationships remain predictive of potential effects to sensitive species.

Approach to evaluating lentic areas

The IETs used for this analysis included all connected lotic habitat in MUs 1 through 5. Although lotic areas comprise the great majority of aquatic habitat in the Elk Valley and the areas most exposed to mine-affected water quality, there are lentic areas in all MUs that could also be exposed to mine-affected water quality. Lentic areas are not currently included in the IETs because existing water quality models do not provide predictions for these areas. Therefore, there is uncertainty with respect to potential effects to sensitive aquatic life in lentic areas.

The integrated effects assessment approach manages this uncertainty in several ways:

- The benchmarks and updated effects information used in the assessment were derived to be predictive of potential effects to the most sensitive benthic invertebrate, fish, and amphibian species that could occur in either lotic or lentic areas.

- Analyses conducted for the EVWQP (Appendix B of Annex E of the EVWQP) showed that water quality in lentic areas in the Elk Valley exhibits a range of mine influence, with some highly connected lentic areas having water quality similar to adjacent lotic areas, some less connected lentic areas exhibiting non-mine affected (reference) water quality, and some intermediate between these conditions. Therefore, projected water quality in lotic areas is expected to provide a reasonable and/or conservative characterization of the water quality that would occur in lentic areas.
- Amphibian species in the Elk Valley breed in lentic areas, and therefore sensitive early life stages would be exposed to water quality in lentic areas. The assessment of amphibians assumed exposure to lotic water quality in all areas, which is likely a conservative basis for evaluating potential effects of nitrate and sulphate in lentic areas for reasons discussed in the previous bullet.

The main residual uncertainty related to lentic areas is the potential for selenium bioaccumulation to be greater than that observed in adjacent lotic areas, with an associated increase in potential effects on sensitive species of benthic invertebrates and fish relative to assessment results for adjacent lotic areas. This uncertainty may be somewhat reduced by the observation that more highly connected lentic areas (with selenium concentrations more closely reflecting adjacent lotic areas) will necessarily have relatively low hydraulic residence times, and therefore are more likely to exhibit “semi-lentic” bioaccumulation conditions (Golder 2020b). However, assessment tools do not currently exist to make site-specific predictions of water quality, bioaccumulation, and potential effects in most lentic areas in the Elk Valley. Therefore, to the extent that some lentic areas may exhibit higher bioaccumulation than adjacent lotic areas, the effect of these conditions on integrated effects across the MU (which may not be large, given the relatively small area of lentic habitat in each MU) would not be captured.

A sensitivity analysis was conducted to evaluate the potential for the approach taken herein to underestimate spatially integrated effects of selenium. The sensitivity analysis was conducted for fish reproduction, which is the most sensitive endpoint for selenium, and focused on the upper Fording River (MU1), which is the area with the highest current and projected aqueous selenium concentrations. Therefore, this analysis is expected to provide the greatest estimated effect of lentic areas on spatially integrated effects. The sensitivity analysis was conducted as follows:

- As in Annex H (Integrated Effects Assessment) of the EVWQP, 9 ha in MU1 (approximately 10% of the total fish-accessible habitat in MU1) was characterized as being off-channel habitat. These areas include side channels, back channels, seasonally connected oxbows, and areas such as marshes, ponds, and beaver impoundments that have a surface water connection to the mainstem Fording River. The EVWQP analysis of selenium bioaccumulation concluded that these areas exhibit a range of bioaccumulation characteristics, with the majority being similar to lotic areas or exhibiting “semi-lentic” bioaccumulation. However, sufficient information does not currently exist to predict which areas exhibit what level of selenium bioaccumulation.
- The area characterized as off-channel habitat was assumed to be used by fish in proportion to its estimated area. This assumption is expected to potentially over-estimate the exposure of fish to selenium in these areas because it does not account for seasonal changes in connectivity and suitability (e.g., some such areas dry up in summer and/or freeze up in winter) or uncertainty in food availability and other elements of suitability for fish feeding (noting that exposure of fish to selenium is necessarily via diet).
- Per the analysis in Annex E (Benchmark Derivation Report for Selenium) of the EVWQP, one-third of off-channel habitat was estimated to have water quality equal to the Fording River mainstem, one-third was estimated to have unaffected water quality, and one-third was estimated to have water quality intermediate between these extremes. For the sensitivity analysis, mainstem water quality was characterized as the mean aqueous selenium concentration across subunits of the upper Fording River in each assessment period.

- The updated “fully lentic” bioaccumulation model from Golder (2020b) was applied to model benthic invertebrate selenium concentrations in each of the three categories of off-channel exposure (mainstem, reference, and intermediate). This calculation is expected to over-estimate selenium exposure because, as shown by analyses in the EVWQP and Golder (2020b), most off-channel areas do not have the biogeochemical characteristics that result in fully lentic patterns of bioaccumulation. Therefore, this calculation provides a potentially large over-estimation of the influence of lentic areas on the spatially integrated effects calculation for selenium.
- The calculation described above resulted in an increase in spatially integrated effects of selenium in MU1 from 2% to 7% in all assessment periods. There was no effect of this calculation on the proportion of mainstem habitat meeting assessment criteria. Thus, inclusion of assumed lentic areas as described above did not change the overall outcome, which was that the assessment criterion was attained in all assessment periods. As noted in the previous bullets, this calculation is expected to give a conservative over-estimate of the potential influence of lentic areas on the spatially integrated assessment.

Uncertainty around selenium bioaccumulation in lentic areas is being progressively reduced through ongoing monitoring of tissue selenium concentrations and development of a lentic ADIT to aid in interpretation of monitoring data. Periodic updates to bioaccumulation modelling approaches also seek to improve tools for predicting conditions in lentic areas.

Characterization of organoselenium concentrations

The approach used in the selenium assessment considered projected future changes in aqueous total selenium concentrations from the 2020 RWQM, while also accounting for localized effects of organoselenium. This approach provides an improved characterization of spatial patterns of bioaccumulation over the statistical modelling used in the EVWQP, that is informed by extensive speciation monitoring and studies of the bioaccumulative potential of organoselenium species. However, it was necessary for this assessment to assume that the spatial pattern of maximum organoselenium concentrations described in 2021 would provide a reasonable approximation of future organoselenium concentrations. This assumption was necessary because tools do not currently exist to project future changes to organoselenium concentrations. Therefore, there is uncertainty in the assessment of selenium in future years associated with potential future changes to organoselenium concentrations.

Approaches to manage this uncertainty include the following:

- Selenium speciation is routinely monitored under the regional Selenium Speciation Monitoring Program (SeSMP) and under various local and operational programs in areas with identified uncertainty in potential speciation changes (ADEPT 2022). These programs consider all identified areas with relatively high organoselenium concentrations, including sedimentation pond outfalls, AWTFs, and saturated rockfill (SRF) facilities. An element of all programs is evaluating trends over time that would warrant further investigation and/or management action.
- Mitigation technologies have been identified for selenium speciation, including the advanced oxidation process (AOP) implemented at the West Line Creek AWTF. These technologies provide a means to reduce organoselenium concentrations as needed to manage selenium risk.
- Seasonal bypass of sedimentation ponds in the LCO Dry Creek Water Management System was shown to be an effective means of reducing organoselenium generation. A similar approach may be implemented in other areas where sedimentation ponds are not needed for control of suspended solids.

- Studies are being undertaken in the SeSMP to better understand the mechanisms that result in organoselenium generation and the characteristics and conditions in sedimentation ponds that promote these mechanisms. The intent is that this understanding will identify options to reduce organoselenium concentrations through modifications to sedimentation pond characteristics and/or operation.

Signature Page

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ATTACHMENT A

Integrated Effects Tables

Table A-1: Integrated Effects Table for Fish - 2021

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																													
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.0	0%	4%	34	6.7	11.0	0%	4%	21	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.02	0%	4%	34	6.74	11.0	0%	4%	21	6.51	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.0	0%	4%	34	6.7	11.0	0%	4%	21	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.02	0%	4%	34	6.74	11.0	0%	4%	21	6.51	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89					344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.02	0%	4%	34	6.74	11.0	0%	4%	21	6.51	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					344	194	258	194	6.8	0%	5.9	1%	3.2	0%	3.3	0%	236	1%	207	1%	136	0%	121	0%	<0.01	0.0	39	6.8	11.0	0%	4%	34	6.7	11.0	0%	4%	21	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					777	341	641	341	32	3%	26	7%	20	3%	19	3%	511	9%	436	6%	341	3%	307	2%	<0.01	0.0	103	7	12	0%	4%	86	7	12	0%	4%	71	7	12	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					777	341	641	341	32	3%	26	7%	20	3%	19	3%	511	9%	436	6%	341	3%	307	2%	<0.01	0.0	103	7.3	11.9	0%	4%	86	7.2	11.7	0%	4%	71	7.1	11.6	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					777	341	641	341	32	3%	26	7%	20	3%	19	3%	511	9%	436	6%	341	3%	307	2%	0.012	0.9	103	8.2	13.6	0%	6%	86	8.1	13.4	0%	6%	71	8.0	13.2	0%	6%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	951	405	793	405	31	2%	26	3%	20	2%	19	1%	684	20%	576	13%	466	7%	425	6%	0.022	1.7	149	9	15	0%	7%	122	9	15	0%	7%	117	9	15	0%	7%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					939	432	784	432	32	3%	26	3%	21	1%	19	1%	669	19%	566	13%	460	7%	418	5%	0.025	2.0	148	9	16	0%	7%	122	9	16	0%	7%	115	9	16	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					939	432	784	432	32	3%	26	3%	21	1%	19	1%	669	19%	566	13%	460	7%	418	5%	0.025	2.0	148	9.4	15.8	0%	7%	122	9.3	15.6	0%	7%	115	9.3	15.6	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					939	432	784	432	32	3%	26	3%	21	1%	19	1%	669	19%	566	13%	460	7%	418	5%	<0.01	0.0	148	7.5	12.2	0%	5%	122	7.4	12.0	0%	5%	115	7.3	12.0	0%	5%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	830	533	710	533	28	2%	29	2%	23	1%	20	1%	515	10%	531	11%	424	6%	376	4%	<0.01	0.0	117	7	12	0%	4%	120	7	12	0%	4%	97	7	12	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					814	516	694	516	28	2%	28	2%	22	1%	19	1%	498	9%	509	9%	414	5%	355	3%	0.012	0.9	113	8	14	0%	6%	114	8	14	0%	6%	94	8	14	0%	6%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	814	516	694	516	28	2%	28	2%	22	1%	19	1%	498	9%	509	9%	414	5%	355	3%	<0.01	0.0	113	7.3	12.0	0%	4%	114	7.3	12.0	0%	4%	94	7.2	11.8	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	814	516	694	516	28	2%	28	2%	22	1%	19	1%	498	9%	509	9%	414	re	355	3%	0.028	2.2	113	9.5	16.0	0%	8%	114	9.5	16.0	0%	8%	94	9.4	15.8	0%	8%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	814	516	694	516	28	2%	28	2%	22	1%	19	1%	498	9%	509	9%	414	5%	355	3%	0.029	2.3	113	9.6	16.1	0%	8%	114	9.6	16.1	0%	8%	94	9.5	15.9	0%	8%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	665	375	610	375	20	1%	17	1%	18	1%	16	1%	370	4%	313	2%	339	3%	302	2%	0.033	2.6	80	10	16	1%	8%	66	10	16	0%	8%	75	10	16	1%	8%
	Tributaries																																													
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	392	221	284	221	8	0%	9	1%	4.2	0%	7.5	1%	280	2%	295	2%	170	0%	256	1%	0.026	2.0	47	9	15	0%	7%	50	9	15	0%	7%	27	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1263	1188	1285	1188	106	59%	100	54%	97	52%	91	47%	634	17%	599	15%	606	15%	568	13%	0.031	2.4	217	10	17	1%	8%	205	10	17	1%	8%	205	10	17	1%	8%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	1338	452	1252	452	78.1	35%	55.9	22%	58.8	25%	56.3	22%	879	35%	639	17%	655	18%	628	16%	-	0.0	233	8	13	0%	5%	167	8	12	0%	5%	172	8	12	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1573	504	1176	504	123	70%	107	60%	79	36%	60	19%	1230	60%	1072	50%	838	32%	632	17%	<0.01	0.0	400	8	13	0%	5%	348	8	13	0%	5%	269	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	2699	2329	2486	2329	27	2%	25	1%	25	1%	23	1%	1983	87%	1863	84%	1842	84%	1737	81%	0.151	11.8	712	20.2	36.5	66%	30%	667	20.2	36.4	66%	30%	654	20.2	36.4	66%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2792	2631	2637	2631	34	3%	33	3%	32	3%	32	3%	2040	88%	2014	87%	1944	86%	1968	86%	0.151	11.8	678	20.2	36.4	66%	30%	669	20.2	36.4	66%	30%	645	20.1	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	781	774	747	747	1.5	0%	1.5	0%	1.2	0%	1.5	0%	508	9%	527	10%	434	6%	527	10%	<0.01	0.0	88	7	12	0%	4%	92	7	12	0%	4%	75	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	1067	281	961	281	91	46%	65.2	79%	77	86%	65.9	79%	466	7%	342	3%	430	6%	373	4%	0.171	13.4	174	21.0	38.0	73%	31%	126.4	20.8	37.7	71%	31%	154.1	20.9	37.9	72%	31%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	649	182	578	182	52	12%	32.3	71%	43	87%	35.13	77%	269	1%	172.4	0%	244.6	1%	201.2	1%	0.055	4.3	99.6	11.6	19.8	2%	11%	63.2	11.4	19.4	2%	11%	86.9	11.5	19.7	2%	11%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1512	684	1398	684	10	0%	7	0%	7.8	0%	7.2	0%	1140	55%	828	31%	950	41%	870	35%	0.031	2.4	232	10.2	17.1	1%	9%	165	10.0	16.8	1%	9%	192	10.1	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1512	684	1398	684	10	0%	7	0%	7.8	0%	7.2	0%	1140	55%	828	31%	950	41%	870	35%	0.328	25.7	232	33	63	99%	56%	165	33	63	99%	56%	192	33	63	99%	56%
	MU1 Summary																																													
	Overall % effect by area (characterized areas)													2%		3%		3%		2%		5%		5%		3%		2%						2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													1.3%		5.4%		0.8%		5.7%		7.5%		6.6%		3.1%		3.2%						0.1%	5.1%				0.1%	5.1%				0.1%	5.7%
	Proportion of MU1 with effect of	<L1												96%		96%		96%		96%		91%		89%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		5%		8%		0%		1%						0%	0%				0%	0%				0%	0%
		L2-L3												2%		0%		0%		1%		2%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		3%		3%		2%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												2%		2%		2%		2%		2%		2%		2%		2%						4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		90%		86%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																													
	d/s Josephine Falls		FO9	9.1					665	375	610	375	20	1%	17	1%	18	1%	16	1%	370	4%	313	2%	339	3%	302	2%	0.034	2.7	80	9.8	16.5	8%	8%	66	9.7	16.3	8%	8%	75	9.8	16.5	8%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					592	339	545	339	15	0%	12	1%	14	1%	13	1%	318	2%	264	1%	288	2%	264	1%	0.034	2.7	61	10	16	7%	8%	50	10	16	7%	8%	59	10	16	7%	8%
	d/s Line Cr.	LC_LC5	FO23	5.9					592	339	545	339	15	0%	12	1%	14	1%	13	1%	318	2%	264	1%	288	2%	264	1%	0.021	1.6	61	9	14	5%	6%	50	9	14	4%	6%	59	9	14	5%	6%
	Tributaries																																													
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					751	382	617	382	26	1%	22.0	3%	20	2%	18.1	1%	484	8%	422	6%	359	3%	318	2%	<0.01	0.0	86	7	12	2%	4%	72	7	12	2%	4%	63	7	11	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					847	410	699	410	18	0%	15.1	1%	16	1%	15.2	1%	581	13%	496	9%	422	5%	376	4%	0.015	1.2	65	8	14	4%	6%	55	8	13	4%	6%	58	8	13	4%	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					847	410	699	410	18	0%	15	1%	16	1%	15	1%	581	13%	496	9%	422	5%	376	4%	0.018	1.4	65	8.47	14.02	4%	6%	53	8.37	13.84	4%	6%	49	8.33	13.76	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					618	304	544	304	12	0%	9.4	0%	11.1	1%	10.6	1%	420	5%	341	3%	304	2%	279	2%	0.035	2.7	63	10	16	8%	8%	53	10	16	8%	8%	49	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					618	304	544	304	12	0%	9	0%	11	1%	11	1%	420	5%	341	3%	304	2%	279	2%	0.010	0.8	63	7.8	12.9	3%	5%	43	7.6	12.5	3%	5%	41	7.6	12.5	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					544	284	489	284	9.8	0%	7.6	0%	9.4	1%	9.1	1%	340	3%	275	2%	259	1%	241	1%	<0.01	0.0	52	7	11	2%	4%	43	7	11	2%	4%	41	7	11	2%	4%
	MU2 Summary																																													
	Overall % effect (characterized areas)													0%		1%		1%		1%		3%		2%		2%		1%						5%	6%				5%	6%				5%	6%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		97%		100%		100%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		3%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																													
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					239	164	207	164	1.3	0%	1.16	0%	1.15	0%	0.79	0%	82	0%	75	0%	69	0%	53	0%	-	0.0	5.8	5.9	11.0	2%	3%	5.1	5.9	11.0	2%	3%	5.1	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					234	162	204	162	1.2	0%	1.08	0%	1.07	0%	0.73	0%	78	0%	72	0%	65	0%	50	0%	<0.01	0.0	5.5	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					234	162	204	162	1.2	0%	1.1	0%	1.1	0%	0.7	0%	78	0%	72	0%	65	0%	50	0%	-	0.0	5.5	6	11	2%	3%	4.8	6	11	2%	3%	4.8	6	11	2%	3%
	u/s Fording R.		ELUFO	13					234	162	204	162	1.2	0%	1.1	0%	1.1	0%	0.7	0%	78	0%	72	0%	65	0%	50	0%	-	0.0	5.5	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%
	Tributaries																																													
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2844	1958	2700	2043	134	76%	106	59%	120	69%	116	66%	1857	84%	1454	72%	1692	80%	1603	77%	0.128	10.0	332	18	32	55%	25%	264	18	32	54%

Table A-2: Integrated Effects Table for Fish - 2022

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																													
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.81	11.02	0%	4%	32	6.71	11.0	0%	4%	20	6.5	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.81	11.02	0%	4%	32	6.71	11.0	0%	4%	20	6.5	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	20%	20%	12%	12%	346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.81	11.02	0%	4%	32	6.71	11.0	0%	4%	20	6.5	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					346	193	256	193	5.8	0%	4.7	0%	2.7	0%	3.0	0%	241	1%	202	1%	137	0%	127	0%	<0.01	0.0	39	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					790	352	638	352	31	3%	26	6%	20	3%	18	2%	516	10%	445	6%	346	3%	306	2%	<0.01	0.0	105	7	12	0%	4%	88	7	12	0%	4%	72	7	12	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					790	352	638	352	31	3%	26	6%	20	3%	18	2%	516	10%	445	6%	346	3%	306	2%	<0.01	0.0	105	7.3	11.9	0%	4%	88	7.2	11.8	0%	4%	72	7.1	11.6	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					790	352	638	352	31	3%	26	6%	20	3%	18	2%	516	10%	445	6%	346	3%	306	2%	0.012	0.9	105	8.2	13.6	0%	6%	88	8.2	13.4	0%	6%	72	8.0	13.3	0%	6%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	956	422	790	422	31	2%	26	3%	19	1%	19	1%	690	21%	587	14%	446	6%	426	6%	0.022	1.7	151	9	15	0%	7%	125	9	15	0%	7%	117	9	15	0%	7%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					949	454	782	454	31	3%	26	2%	19	1%	19	1%	678	20%	579	13%	442	6%	419	5%	0.025	2.0	150	9	16	0%	7%	124	9	16	0%	7%	115	9	16	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					949	454	782	454	31	3%	26	2%	19	1%	19	1%	678	20%	579	13%	442	6%	419	5%	0.025	2.0	150	9.4	15.8	0%	7%	124	9.4	15.6	0%	7%	115	9.3	15.6	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					949	454	782	454	31	3%	26	2%	19	1%	19	1%	678	20%	579	13%	442	6%	419	5%	<0.01	0.0	150	7.5	12.2	0%	5%	124	7.4	12.1	0%	5%	115	7.4	12.0	0%	5%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	844	560	713	560	30	2%	29	2%	21	1%	21	1%	553	12%	551	12%	426	6%	397	5%	<0.01	0.0	127	7	12	0%	4%	125	7	12	0%	4%	96	7	12	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					826	543	697	543	29	2%	28	2%	21	1%	19	1%	534	11%	533	11%	416	5%	359	3%	0.012	0.9	122	8	14	0%	6%	120	8	14	0%	6%	93	8	13	0%	6%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	826	543	697	543	29	2%	28	2%	21	1%	19	1%	534	11%	533	11%	416	5%	359	3%	<0.01	0.0	122	7.4	12.1	0%	4%	120	7.4	12.0	0%	4%	93	7.2	11.8	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	826	543	697	543	29	2%	28	2%	21	1%	19	1%	534	11%	533	11%	416	re	359	3%	0.028	2.2	122	9.6	16.0	0%	8%	120	9.6	16.0	0%	8%	93	9.4	15.8	0%	8%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	826	543	697	543	29	2%	28	2%	21	1%	19	1%	534	11%	533	11%	416	5%	359	3%	0.029	2.3	122	9.7	16.2	0%	8%	120	9.6	16.2	0%	8%	93	9.5	15.9	0%	8%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	684	389	625	389	20	1%	17	1%	17	1%	16	1%	395	5%	329	3%	339	3%	314	2%	0.033	2.6	85	10	16	1%	8%	69	10	16	0%	8%	78	10	16	1%	8%
	Tributaries																																													
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	390	229	288	229	7	0%	8	1%	3.5	0%	6.9	1%	293	2%	310	2%	172	0%	280	2%	0.026	2.0	49	9	15	0%	7%	52	9	15	0%	7%	27	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1303	1223	1314	1223	105	58%	98	53%	97	52%	92	47%	663	19%	625	16%	633	17%	596	14%	0.031	2.4	227	10	17	1%	9%	214	10	17	1%	9%	214	10	17	1%	9%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	1330	465	1251	465	80.8	37%	57.2	21%	58.7	22%	56.5	20%	883	36%	636	17%	641	17%	617	16%	-	0.0	235	8	13	0%	5%	168	8	12	0%	5%	169	8	12	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1754	547	1222	547	123	70%	106	59%	62	20%	62	20%	1297	64%	1121	53%	981	43%	665	19%	<0.01	0.0	420	8	13	0%	5%	363	8	13	0%	5%	212	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	2820	2435	2600	2435	28	2%	26	1%	25	1%	24	1%	2081	88%	1947	86%	1940	86%	1830	84%	0.151	11.8	748	20.2	36.5	67%	30%	696	20.2	36.4	66%	30%	688	20.2	36.4	66%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2967	2803	2803	2803	36	4%	36	4%	35	4%	35	4%	2147	89%	2160	89%	2056	88%	2099	89%	0.151	11.8	714	20.2	36.5	66%	30%	718	20.2	36.5	66%	30%	683	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	796	787	764	764	1.3	0%	1.3	0%	1.0	0%	1.3	0%	527	10%	542	11%	444	6%	530	10%	<0.01	0.0	91	7	12	0%	4%	94	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	1100	323	1007	323	97	52%	72.4	74%	73	75%	64.2	66%	548	11%	417	5%	463	7%	406	5%	0.171	13.4	198	21.0	38.2	73%	32%	150.0	20.9	37.9	72%	32%	158.8	20.9	37.9	72%	32%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	670	195	618	195	58	17%	32.5	65%	43	82%	35.41	71%	333	3%	190.5	1%	274.6	2%	226.4	1%	0.055	4.3	120.1	11.7	20.0	2%	11%	67.9	11.4	19.4	2%	11%	93.7	11.6	19.7	2%	11%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1519	706	1410	706	9	0%	6	0%	6.7	0%	6.2	0%	1172	57%	836	32%	964	42%	881	35%	0.031	2.4	238	10.2	17.1	1%	9%	165	10.0	16.8	1%	9%	193	10.1	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1519	706	1410	706	9	0%	6	0%	6.7	0%	6.2	0%	1172	57%	836	32%	964	42%	881	35%	0.328	25.7	238	33	64	99%	56%	165	33	63	99%	56%	193	33	63	99%	56%
	MU1 Summary																																													
	Overall % effect by area (characterized areas)													2%		3%		2%		2%		6%		5%		3%		2%							2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													1.4%		5.1%		0.7%		5.4%		8.5%		7.3%		3.0%		3.4%							0.2%	5.2%				0.1%	5.1%				0.1%	5.7%
	Proportion of MU1 with effect of	<L1												96%		96%		96%		96%		61%		63%		92%		96%							97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		36%		34%		0%		1%							0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		1%		2%		2%		2%							0%	2%				0%	2%				0%	2%
		>L3												2%		3%		3%		2%		2%		0%		0%		0%							2%	0%				2%	0%				2%	0%
		Uncharacterized areas												2%		2%		2%		2%		2%		2%		2%		2%							4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		38%		38%		91%		100%							100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																													
	d/s Josephine Falls		FO9	9.1					684	389	625	389	20	1%	17	1%	17	1%	16	1%	395	5%	329	3%	339	3%	314	2%	0.034	2.7	85	9.9	16.6	8%	8%	69	9.8	16.4	8%	8%	78	9.8	16.5	8%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					610	357	563	357	16	0%	12	1%	14	1%	13	1%	338	3%	269	1%	294	2%	277	2%	0.034	2.7	64	10	16	8%	8%	50	10	16	7%	8%	63	10	16	8%	8%
	d/s Line Cr.	LC_LC5	FO23	5.9					610	357	563	357	16	0%	12	1%	14	1%	13	1%	338	3%	269	1%	294	2%	277	2%	0.021	1.6	64	9	14	5%	6%	50	9	14	5%	6%	63	9	14	5%	6%
	Tributaries																																													
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					773	427	648	427	27	2%	22.6	2%	22	2%	19.6	1%	502	9%	432	6%	402	5%	337	3%	<0.01	0.0	89	7	12	2%	4%	75	7	12	2%	4%	71	7	12	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					853	456	720	456	21	1%	19.1	1%	18	1%	16.9	1%	593	14%	511	9%	458	7%	390	4%	0.015	1.2	70	8	14	4%	6%	64	8	14	4%	6%	64	8	14	4%	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					853	456	720	456	21	1%	19	1%	18	1%	17	1%	593	14%	511	9%	458	7%	390	4%	0.018	1.4	70	8.51	14.09	4%	6%	53	8.37	13.83	4%	6%	54	8.38	13.85	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					631	345	558	345	13	0%	11.2	0%	12.8	1%	11.5	1%	428	6%	348	3%	329	3%	289	2%	0.035	2.7	63	10	16	8%	8%	53	10	16	7%	8%	54	10	16	8%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					631	345	558	345	13	0%	11	0%	13	1%	12	1%	428	6%	348	3%	329	3%	289	2%	0.010	0.8	63	7.8	12.9	3%	5%	42	7.6	12.5	3%	5%	46	7.7	12.6	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					554	323	501	323	11.0	0%	8.6	0%	10.7	1%	9.7	0%	343	3%	282	2%	282	2%	250	1%	<0.01	0.0	51	7	11	2%	4%	42	7	11	2%	4%	46	7	11	2%	4%
	MU2 Summary																																													
	Overall % effect (characterized areas)													0%		1%		1%		1%		3%		2%		2%		1%							5%	6%				5%	6%				5%	6%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		97%		100%		100%		100%							100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		3%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%							100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																													
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					254	166	209	166	1.4	0%	1.27	0%	1.18	0%	0.83	0%	88	0%	75	0%	73	0%	55	0%	-	0.0	6.6	6.0	11.0	2%	3%	5.8	5.9	11.0	2%	3%	5.6	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					248	165	205	165	1.3	0%	1.18	0%	1.1	0%	0.77	0%	84	0%	72	0%	68	0%	52	0%	<0.01	0.0	6.2	6.0	11.0	2%	3%	5.4	5.9	11.0	2%	3%	5.2	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					248	165	205	165	1.3	0%	1.2	0%	1.1	0%	0.8	0%	84	0%	72	0%	68	0%	52	0%	-	0.0	6.2	6	11	2%	3%	5.4	6	11	2%	3%	5.2	6	11	2%	3%
	u/s Fording R.		ELUFO	13					248	165	205	165	1.3	0%	1.2	0%	1.1	0%	0.8	0%	84	0%	72	0%	68	0%	52	0%	-	0.0	6.2	6.0	11.0	2%	3%	5.4	5.9	11.0	2%	3%	5.2	5.9	11.0	2%	3%
	Tributaries																																													
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2887	2026	2731	2148	139	78%	103	57%	111	62%	108	61%	1937	86%	1555	76%	1730	81%	1655	79%	0.128	10.0	350	18

Table A-3: Integrated Effects Table for Fish - 2023

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																															
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.72	11.0	0%	4%	20	6.49	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.72	11.0	0%	4%	20	6.49	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89		20%	20%	12%	346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.72	11.0	0%	4%	20	6.49	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					346	196	259	196	4.7	0%	4.0	0%	2.2	0%	2.5	0%	240	1%	208	1%	137	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					775	334	616	334	28	2%	25	7%	16	2%	15	1%	505	9%	422	5%	335	3%	293	2%	<0.01	0.0	98	7	12	0%	4%	84	7	12	0%	4%	63	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					775	334	616	334	28	2%	25	7%	16	2%	15	1%	505	9%	422	5%	335	3%	293	2%	<0.01	0.0	98	7.3	11.8	0%	4%	84	7.2	11.7	0%	4%	63	7.0	11.4	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					775	334	616	334	28	2%	25	7%	16	2%	15	1%	505	9%	422	5%	335	3%	293	2%	0.012	0.9	98	8.2	13.5	0%	6%	84	8.1	13.4	0%	6%	63	8.0	13.1	0%	6%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68		2.7%	3.1%	10%	1.3%	962	380	750	380	25	1%	22	3%	15	1%	13	1%	686	20%	581	13%	450	7%	391	4%	0.022	1.7	85	9	15	0%	7%	74	9	15	0%	7%	65	9	15	0%	7%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4						959	423	749	423	26	1%	23	2%	16	1%	14	0%	679	20%	575	13%	451	7%	390	4%	0.025	2.0	88	9	15	0%	7%	76	9	15	0%	7%	66	9	15	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4						959	423	749	423	26	1%	23	2%	16	1%	14	0%	679	20%	575	13%	451	7%	390	4%	0.025	2.0	88	9.2	15.3	0%	7%	76	9.1	15.2	0%	7%	66	9.0	15.0	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2						959	423	749	423	26	1%	23	2%	16	1%	14	0%	679	20%	575	13%	451	7%	390	4%	<0.01	0.0	88	7.2	11.7	0%	4%	76	7.1	11.6	0%	4%	66	7.1	11.5	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9		40%	22%	16%	47%	873	571	718	571	25	1%	25	1%	19	1%	18	0%	553	12%	562	12%	441	6%	407	5%	<0.01	0.0	90	7	12	0%	4%	88	7	12	0%	4%	69	7	12	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9						851	548	701	548	24	1%	24	1%	19	0%	16	0%	536	11%	536	11%	430	6%	361	3%	0.012	0.9	87	8	13	0%	5%	85	8	13	0%	5%	67	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11		4.9%	9.2%	17%	5.8%	851	548	701	548	24	1%	24	1%	19	0%	16	0%	536	11%	536	11%	430	6%	361	3%	<0.01	0.0	87	7.2	11.7	0%	4%	85	7.2	11.7	0%	4%	67	7.1	11.5	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9		2.3%	3.8%	7.7%	0.6%	851	548	701	548	24	1%	24	1%	19	0%	16	0%	536	11%	536	11%	430	re	361	3%	0.028	2.2	87	9.4	15.7	0%	7%	85	9.4	15.7	0%	7%	67	9.3	15.5	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9		4.2%	9.2%	7.3%	9.1%	851	548	701	548	24	1%	24	1%	19	0%	16	0%	536	11%	536	11%	430	6%	361	3%	0.029	2.3	87	9.5	15.9	0%	7%	85	9.5	15.8	0%	7%	67	9.4	15.6	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5		7.6%	4.6%	6.2%	1.3%	689	390	630	390	18	0%	15	1%	15	1%	14	1%	403	5%	332	3%	348	3%	316	2%	0.033	2.6	69	10	16	0%	8%	56	10	16	0%	8%	58	10	16	0%	8%
	Tributaries																																															
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*		*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*		*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*		*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*		*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0		12%	3.1%	9.7%	1.3%	391	227	289	227	6	0%	6	0%	2.9	0%	5.8	0%	293	2%	315	2%	172	0%	285	2%	0.026	2.0	48	9	15	0%	7%	52	9	15	0%	7%	26	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29		0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3		0%	6.2%	0%	1.3%	1378	1234	1406	1234	57	16%	57	16%	50	11%	51	11%	799	29%	769	27%	711	22%	682	20%	0.031	2.4	130	10	17	1%	8%	133	10	17	1%	8%	119	10	16	1%	8%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0		0%	0.0%	0%	0%	1707	1001	1571	1001	86.5	43%	70.1	27%	77.6	34%	73.4	30%	928	39%	763	26%	834	32%	788	28%	-	0.0	251	8	13	0%	5%	204	8	13	0%	5%	224	8	13	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1		0%	0.8%	0%	0%	1883	637	1391	637	114	65%	92	48%	66	23%	54	13%	1428	71%	1256	62%	1029	47%	800	29%	<0.01	0.0	389	8	13	0%	5%	316	8	13	0%	5%	216	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0		0%	0%	0%	0%	2893	2554	2712	2554	28	2%	26	1%	24	1%	23	1%	2172	90%	2051	88%	2011	87%	1920	86%	0.151	11.8	778	20.3	36.6	67%	30%	732	20.2	36.5	66%	30%	714	20.2	36.5	66%	30%
	Cataract Creek	GH_CC1	CATCK	0.0		0%	0%	0%	0%	3014	2910	2894	2894	38	5%	38	5%	34	3%	37	4%	2235	90%	2243	90%	2091	88%	2186	90%	0.151	11.8	743	20.2	36.5	66%	30%	746	20.2	36.5	66%	30%	693	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2		0%	0%	0%	0%	808	793	772	772	1.1	0%	1.1	0%	0.8	0%	1.0	0%	536	11%	553	12%	449	7%	538	11%	<0.01	0.0	93	7	12	0%	4%	96	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9		0%	0%	0%	0%	660	335	590	335	75	32%	16.6	2%	15	1%	13.1	1%	513	10%	353	3%	341	3%	291	2%	0.171	13.4	169	21.0	38.0	73%	31%	58.6	20.4	36.9	68%	31%	52.8	20.4	36.8	68%	31%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33		0%	0%	0%	5.8%	447	196	403	196	48	15%	8.3	2%	9	3%	7.71	2%	339	3%	177.2	0%	211.6	1%	172.9	0%	0.055	4.3	108.1	11.6	19.9	2%	11%	29.7	11.0	18.7	1%	11%	33.4	11.0	18.8	1%	11%
	Unnamed Creek		LC_UC	0.8		0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7		0%	0%	0%	0%	1518	698	1419	698	8	0%	5	0%	5.5	0%	5.1	0%	1181	57%	852	33%	969	42%	889	36%	0.031	2.4	236	10.2	17.1	1%	9%	167	10.0	16.8	1%	9%	193	10.1	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24		0%	0%	0%	0.6%	1518	698	1419	698	8	0%	5	0%	5.5	0%	5.1	0%	1181	57%	852	33%	969	42%	889	36%	0.328	25.7	236	33	64	99%	56%	167	33	63	99%	56%	193	33	63	99%	56%
	MU1 Summary																																															
	Overall % effect by area (characterized areas)														1%		1%		0%		0%		6%		5%		3%		2%							2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)														0.8%		2.4%		0.4%		0.5%		8.5%		8.1%		3.2%		3.3%							0.1%	5.0%				0.1%	5.0%				0.1%	5.5%
	Proportion of MU1 with effect of	<L1													96%		99%		99%		99%		63%		63%		92%		96%							97%	96%				97%	96%				97%	96%
		L1-L2													1%		0%		0%		0%		33%		34%		0%		0%							0%	0%				0%	0%				0%	0%
		L2-L3													2%		0%		0%		0%		1%		2%		2%		2%							0%	2%				0%	2%				0%	2%
		>L3													0%		0%		0%		0%		2%		0%		0%		0%							2%	0%				2%	0%				2%	0%
		Uncharacterized areas													2%		2%		2%		2%		2%		2%		2%		2%							4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1													100%		100%		100%		100%		38%		38%		91%		100%							100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																															
	d/s Josephine Falls		FO9	9.1						689	390	630	390	18	0%	15	1%	15	1%	14	1%	403	5%	332	3%	348	3%	316	2%	0.034	2.7	69	9.8	16.4	8%	8%	56	9.7	16.2	7%	8%	58	9.7	16.2	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15						614	364	562	364	14	0%	11	0%	12	0%	11	0%	347	3%	282	2%	304	2%	277	2%	0.034	2.7	55	10	16	7%	8%	43	10	16	7%	8%	49	10	16	7%	8%
	d/s Line Cr.	LC_LC5	FO23	5.9						614	364	562	364	14	0%	11	0%	12	0%	11	0%	347	3%	282	2%	304	2%	277	2%	0.021	1.6	55	9	14	5%	6%	43	9	14	4%	6%	49	9	14	4%	6%
	Tributaries																																															
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2						752	419	619	419	29	2%	25.6	3%	18	1%	15.9	1%	550	12%	489	8%	385	4%	327	3%	<0.01	0.0	98	7	12	2%	4%	87	7	12	2%	4%	65	7	11	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76						849	446	733	446	20	1%	17.9	1%	15	0%	13.9	0%	639	17%	560	12%	457	7%	401	5%	0.015	1.2	74	8	14	4%	6%	67	8	14	4%	6%	61	8	14	4%	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75						849	446	733	446	20	1%	18	1%	15	0%	14	0%	639	17%	560	12%	457	7%	401	5%	0.018	1.4	74	8.53	14.14	4%	6%	60	8.43	13.94	4%	6%	52	8.36	13.81	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8						628	337	575	337	13	0%	11.1	1%	10.1	0%	9.5	0%	459	7%	387	4%	334	3%	301	2%	0.035	2.7	69	10	17	8%	8%	60	10	16	8%	8%	52	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4						628	337	575	337	13	0%	11	1%	10	0%	9	0%	459	7%	387	4%	334	3%	301	2%	0.010	0.8	69	7.9	12.9	3%	5%	48	7.7	12.6	3%	5%	45	7.7	12.5	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6						554	312	517	312	11.2	0%	8.9	0%	8.7	0%	8.3	0%	374	4%	318	2%	287	2%	261	1%	<0.01	0.0	56	7	11	2%	4%	48	7	11	2%	4%	45	7	11	2%	4%
	MU2 Summary																																															
	Overall % effect (characterized areas)														0%		0%		0%		0%		3%		2%		2%		1%							5%	6%				5%	6%				5%	6%
	Proportion of MU2 with effect of	<L1													100%		100%		100%		100%		95%		97%		100%		100%							100%	100%				100%	100%				100%	100%
		L1-L2													0%		0%		0%		0%		5%		3%		0%		0%							0%	0%				0%	0%				0%	0%
		L2-L3													0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		>L3													0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		Uncharacterized areas													0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1													100%		100%		100%		100%		100%		100%		100%		100%							100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																															
	u/s GHO	*GH_ER2*	*ELUGH*	*215*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18						251	166	210	166	1.4	0%	1.27	0%	1.09	0%	0.79	0%	89	0%	77	0%	70	0%	55	0%	-	0.0	6.8	6.0	11.0	2%	3%	6.2	6.0	11.0	2%	3%	5.7	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14						245	164	206	164	1.3	0%	1.18	0%	1.02	0%	0.74	0%	84	0%	73	0%	66	0%	52	0%	<0.01	0.0	6.4	6.0	11.0	2%	3%	5.8	5.9	11.0	2%	3%	5.3	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41						245	164	206	164	1.3	0%	1.2	0%	1.0	0%	0.7	0%	84	0%	73	0%	66	0%	52	0%	-	0.0	6.4	6	11	2%	3%	5.8	6	11	2%	3%	5.3	6	11	2%	3%
	u/s Fording R.		ELUFO	13						245	164	206	164	1.3	0%	1.2	0%	1.0	0%	0.7	0%	84	0%	73	0%	66	0%	52	0%	-	0.0	6.4	6.0	11.0	2%	3%	5.8	5.9	11.0	2%	3%	5.3	5.9	11.0	2%	3%
	Tributaries																																															
	Michelson Cr.	*GH_MC1*	*-*	*0.007*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*						*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*						-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0						2962	2085	2783	2163	123

Table A-4: Integrated Effects Table for Fish - 2024

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																														
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.8	11.0	0%	4%	33	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.79	11.01	0%	4%	33	6.73	11.0	0%	4%	20	6.49	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.8	11.0	0%	4%	33	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.79	11.01	0%	4%	33	6.73	11.0	0%	4%	20	6.49	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89		20%	20%	12%	351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.79	11.01	0%	4%	33	6.73	11.0	0%	4%	20	6.49	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					351	187	256	187	3.9	0%	3.4	0%	1.8	0%	2.0	0%	244	1%	216	1%	138	0%	126	0%	<0.01	0.0	38	6.8	11.0	0%	4%	33	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					799	348	631	348	13	0%	11	0%	8	0%	8	0%	526	10%	441	6%	345	3%	304	2%	<0.01	0.0	49	7	11	0%	4%	40	7	11	0%	4%	38	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					799	348	631	348	13	0%	11	0%	8	0%	8	0%	526	10%	441	6%	345	3%	304	2%	<0.01	0.0	49	6.9	11.2	0%	4%	40	6.8	11.1	0%	4%	38	6.8	11.0	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					799	348	631	348	13	0%	11	0%	8	0%	8	0%	526	10%	441	6%	345	3%	304	2%	0.012	0.9	49	7.9	12.9	0%	5%	40	7.8	12.7	0%	5%	38	7.7	12.7	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68		2.7%	3.1%	10%	1.3%	983	395	762	395	12	0%	10	0%	8	0%	7	0%	701	21%	598	14%	457	7%	399	5%	0.022	1.7	49	9	14	0%	6%	40	9	14	0%	6%	43	9	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					981	437	763	437	14	0%	12	0%	10	0%	9	0%	699	21%	595	14%	459	7%	400	5%	0.025	2.0	55	9	15	0%	7%	45	9	15	0%	7%	46	9	15	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					981	437	763	437	14	0%	12	0%	10	0%	9	0%	699	21%	595	14%	459	7%	400	5%	0.025	2.0	55	8.9	14.9	0%	7%	45	8.8	14.7	0%	7%	46	8.8	14.7	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					981	437	763	437	14	0%	12	0%	10	0%	9	0%	699	21%	595	14%	459	7%	400	5%	<0.01	0.0	55	7.0	11.3	0%	4%	45	6.9	11.1	0%	4%	46	6.9	11.2	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9		40%	22%	16%	47%	894	589	728	589	20	1%	20	1%	15	0%	13	0%	574	13%	583	13%	453	7%	398	5%	<0.01	0.0	74	7	12	0%	4%	71	7	12	0%	4%	59	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9						872	565	711	565	20	1%	19	1%	15	0%	13	0%	557	12%	555	12%	442	6%	369	4%	0.012	0.9	73	8	13	0%	5%	69	8	13	0%	5%	57	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	872	565	711	565	20	1%	19	1%	15	0%	13	0%	557	12%	555	12%	442	6%	369	4%	<0.01	0.0	73	7.1	11.6	0%	4%	69	7.1	11.5	0%	4%	57	7.0	11.4	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	872	565	711	565	20	1%	19	1%	15	0%	13	0%	557	12%	555	12%	442	re	369	4%	0.028	2.2	73	9.3	15.6	0%	7%	69	9.3	15.5	0%	7%	57	9.2	15.3	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	872	565	711	565	20	1%	19	1%	15	0%	13	0%	557	12%	555	12%	442	6%	369	4%	0.029	2.3	73	9.4	15.7	0%	7%	69	9.4	15.7	0%	7%	57	9.3	15.5	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	699	407	638	407	15	0%	12	0%	12	0%	12	0%	416	5%	344	3%	357	3%	322	3%	0.033	2.6	60	10	16	0%	8%	48	9	16	0%	8%	50	10	16	0%	8%
	Tributaries																																														
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	390	222	285	222	5	0%	5	0%	2.4	0%	4.4	0%	295	2%	314	2%	173	0%	266	1%	0.026	2.0	47	9	15	0%	7%	51	9	15	0%	7%	26	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1381	1074	1364	1074	13	0%	14	0%	13	0%	14	0%	816	30%	684	20%	755	26%	724	23%	0.031	2.4	22	9	15	0%	7%	28	9	15	0%	7%	23	9	15	0%	7%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	1871	1206	1849	1206	102.6	56%	85.3	41%	93.9	49%	88.9	45%	1127	54%	928	39%	1028	47%	969	42%	-	0.0	307	8	13	0%	5%	251	8	13	0%	5%	279	8	13	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1933	666	1400	666	126	72%	102	56%	65	23%	53	13%	1468	72%	1309	65%	1034	47%	807	30%	<0.01	0.0	417	8	13	0%	5%	340	8	13	0%	5%	227	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	2968	2646	2783	2646	26	1%	25	1%	25	1%	23	1%	2216	90%	2120	89%	2075	88%	1981	87%	0.151	11.8	794	20.3	36.6	67%	30%	757	20.2	36.5	67%	30%	743	20.2	36.5	66%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2996	2922	2902	2902	34	4%	34	4%	31	2%	34	3%	2221	90%	2227	90%	2096	89%	2175	90%	0.151	11.8	735	20.2	36.5	66%	30%	737	20.2	36.5	66%	30%	691	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	808	794	770	770	0.9	0%	0.9	0%	0.7	0%	0.9	0%	539	11%	555	12%	450	7%	536	11%	<0.01	0.0	93	7	12	0%	4%	96	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	687	330	598	330	16	0%	14.2	1%	12	1%	10.8	1%	441	6%	380	4%	342	3%	297	2%	0.171	13.4	58	20.4	36.9	68%	30%	51.1	20.3	36.8	67%	30%	44.9	20.3	36.6	67%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	461	195	408	195	10	0%	7.7	2%	7	1%	6.48	1%	293	2%	205.7	1%	220.6	1%	176.9	0%	0.055	4.3	38.5	11.1	18.9	1%	10%	28.2	11.0	18.6	1%	10%	28.5	11.0	18.6	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1519	712	1402	712	6	0%	4	0%	4.5	0%	4.2	0%	1177	57%	871	35%	967	42%	883	36%	0.031	2.4	233	10.2	17.1	1%	9%	170	10.0	16.8	1%	9%	190	10.0	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1519	712	1402	712	6	0%	4	0%	4.5	0%	4.2	0%	1177	57%	871	35%	967	42%	883	36%	0.328	25.7	233	33	63	99%	56%	170	33	63	99%	56%	190	33	63	99%	56%
	MU1 Summary																																														
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		7%		6%		3%		2%						2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													0.3%		0.7%		0.1%		0.2%		9.2%		8.3%		3.5%		3.4%						0.1%	4.9%				0.1%	4.8%				0.1%	5.3%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		59%		63%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		32%		34%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		6%		2%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												2%		2%		2%		2%		2%		2%		2%		2%						4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		31%		38%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																														
	d/s Josephine Falls		FO9	9.1					699	407	638	407	15	0%	12	0%	12	0%	12	0%	416	5%	344	3%	357	3%	322	3%	0.034	2.7	60	9.7	16.2	7%	8%	48	9.6	16.0	7%	8%	50	9.6	16.1	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					624	368	571	368	12	0%	10	0%	10	0%	10	0%	356	3%	296	2%	312	2%	284	2%	0.034	2.7	50	10	16	7%	8%	39	9	16	7%	8%	44	10	16	7%	8%
	d/s Line Cr.	LC_LC5	FO23	5.9					624	368	571	368	12	0%	10	0%	10	0%	10	0%	356	3%	296	2%	312	2%	284	2%	0.021	1.6	50	9	14	4%	6%	39	8	14	4%	6%	44	9	14	4%	6%
	Tributaries																																														
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					748	404	608	404	23	1%	19.4	1%	16	1%	14.1	0%	530	10%	457	7%	385	4%	323	3%	<0.01	0.0	91	7	12	2%	4%	77	7	12	2%	4%	65	7	11	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					873	445	723	445	16	0%	13.9	0%	14	0%	12.4	0%	640	17%	557	12%	463	7%	398	5%	0.015	1.2	69	8	14	4%	6%	62	8	14	4%	6%	61	8	14	4%	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					873	445	723	445	16	0%	14	0%	14	0%	12	0%	640	17%	557	12%	463	7%	398	5%	0.018	1.4	69	8.5	14.07	4%	6%	58	8.41	13.91	4%	6%	52	8.36	13.81	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					640	340	566	340	11	0%	8.9	0%	8.9	0%	8.5	0%	460	7%	396	5%	337	3%	298	2%	0.035	2.7	66	10	16	8%	8%	58	10	16	8%	8%	52	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					640	340	566	340	11	0%	9	0%	9	0%	9	0%	460	7%	396	5%	337	3%	298	2%	0.010	0.8	66	7.9	12.9	3%	5%	47	7.7	12.6	3%	5%	44	7.7	12.5	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					567	314	512	314	9.0	0%	7.1	0%	7.7	0%	7.4	0%	375	4%	324	3%	290	2%	260	1%	<0.01	0.0	55	7	11	2%	4%	47	7	11	2%	4%	44	7	11	2%	4%
	MU2 Summary																																														
	Overall % effect (characterized areas)													0%		0%		0%		0%		4%		2%		2%		1%						5%	6%				5%	6%				5%	6%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		95%		97%		100%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		5%		3%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																														
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					248	166	209	166	1.3	0%	1.18	0%	0.98	0%	0.7	0%	86	0%	78	0%	70	0%	54	0%	-	0.0	6.9	6.0	11.0	2%	3%	6.4	6.0	11.0	2%	3%	5.7	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					242	164	205	164	1.2	0%	1.1	0%	0.91	0%	0.65	0%	82	0%	74	0%	66	0%	52	0%	<0.01	0.0	6.5	6.0	11.0	2%	3%	6.0	6.0	11.0	2%	3%	5.4	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					242	164	205	164	1.2	0%	1.1	0%	0.9	0%	0.7	0%	82	0%	74	0%	66	0%	52	0%	-	0.0	6.5	6	11	2%	3%	6.0	6	11	2%	3%	5.4	6	11	2%	3%
	u/s Fording R.		ELUFO	13					242	164	205	164	1.2	0%	1.1	0%	0.9	0%	0.7	0%	82	0%	74	0%	66	0%	52	0%	-	0.0	6.5	6.0	11.0	2%	3%	6.0	6.0	11.0	2%	3%	5.4	5.9	11.0	2%	3%
	Tributaries																																														
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2914	2137	2760	2137	110	62%	78	35%	85	41%	83	39%	2116	89%	1646	79%	1843	84%	1764	82%	0.128	10.0	343	18

Table A-5: Integrated Effects Table for Fish - 2025

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																													
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	20	6.5	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	35	6.75	11.0	0%	4%	20	6.48	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	35	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	35	6.75	11.0	0%	4%	20	6.48	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89					347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.79	11.01	0%	4%	35	6.75	11.0	0%	4%	20	6.48	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					347	189	259	189	3.3	0%	3.0	0%	1.5	0%	1.7	0%	245	1%	226	1%	138	0%	130	0%	<0.01	0.0	38	6.8	11.0	0%	4%	35	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					799	350	648	350	12	0%	10	0%	8	0%	7	0%	548	11%	464	7%	354	3%	319	2%	<0.01	0.0	48	7	11	0%	4%	40	7	11	0%	4%	40	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					799	350	648	350	12	0%	10	0%	8	0%	7	0%	548	11%	464	7%	354	3%	319	2%	<0.01	0.0	48	6.9	11.2	0%	4%	40	6.8	11.0	0%	4%	40	6.8	11.0	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					799	350	648	350	12	0%	10	0%	8	0%	7	0%	548	11%	464	7%	354	3%	319	2%	0.012	0.9	48	7.9	12.9	0%	5%	40	7.8	12.7	0%	5%	40	7.8	12.7	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	977	391	777	391	11	0%	10	0%	7	0%	7	0%	716	23%	616	16%	460	7%	412	5%	0.022	1.7	48	9	14	0%	6%	40	9	14	0%	6%	45	9	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					976	438	779	438	13	0%	11	0%	9	0%	8	0%	715	23%	614	15%	462	7%	414	5%	0.025	2.0	55	9	15	0%	7%	45	9	15	0%	7%	47	9	15	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					976	438	779	438	13	0%	11	0%	9	0%	8	0%	715	23%	614	15%	462	7%	414	5%	0.025	2.0	55	8.9	14.9	0%	7%	45	8.8	14.7	0%	7%	47	8.9	14.7	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					976	438	779	438	13	0%	11	0%	9	0%	8	0%	715	23%	614	15%	462	7%	414	5%	<0.01	0.0	55	7.0	11.3	0%	4%	45	6.9	11.1	0%	4%	47	6.9	11.2	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	895	602	741	602	18	0%	18	0%	14	0%	13	0%	586	14%	598	14%	460	7%	422	6%	<0.01	0.0	71	7	12	0%	4%	70	7	12	0%	4%	59	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					874	578	723	578	18	0%	17	0%	14	0%	12	0%	570	13%	572	13%	448	7%	381	4%	0.012	0.9	70	8	13	0%	5%	67	8	13	0%	5%	58	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	874	578	723	578	18	0%	17	0%	14	0%	12	0%	570	13%	572	13%	448	7%	381	4%	<0.01	0.0	70	7.1	11.5	0%	4%	67	7.1	11.5	0%	4%	58	7.0	11.4	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	874	578	723	578	18	0%	17	0%	14	0%	12	0%	570	13%	572	13%	448	re	381	4%	0.028	2.2	70	9.3	15.5	0%	7%	67	9.3	15.5	0%	7%	58	9.2	15.3	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	874	578	723	578	18	0%	17	0%	14	0%	12	0%	570	13%	572	13%	448	7%	381	4%	0.029	2.3	70	9.4	15.7	0%	7%	67	9.3	15.6	0%	7%	58	9.3	15.5	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	705	413	648	413	14	0%	11	0%	11	0%	11	0%	428	6%	362	4%	362	4%	332	3%	0.033	2.6	58	10	16	0%	8%	46	9	16	0%	8%	50	10	16	0%	8%
	Tributaries																																													-
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	387	226	289	226	4	0%	4	0%	1.9	0%	3.7	0%	293	2%	313	2%	172	0%	272	2%	0.026	2.0	46	9	15	0%	7%	50	9	15	0%	7%	26	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1367	1083	1343	1083	12	0%	13	0%	12	0%	13	0%	831	32%	701	21%	752	25%	741	25%	0.031	2.4	23	9	15	0%	7%	27	9	15	0%	7%	24	9	15	0%	7%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	2015	1384	1947	1384	109.1	61%	94.4	50%	87.9	44%	86.1	42%	1230	60%	1094	52%	1096	52%	1060	49%	-	0.0	333	8	13	0%	5%	295	8	13	0%	5%	291	8	13	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1893	668	1443	668	121	69%	102	56%	63	20%	52	12%	1501	74%	1345	67%	1040	48%	842	32%	<0.01	0.0	430	8	13	0%	5%	365	8	13	0%	5%	233	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	3042	2809	2895	2809	28	2%	27	2%	26	2%	25	1%	2268	91%	2204	90%	2142	89%	2067	88%	0.151	11.8	821	20.3	36.6	67%	30%	796	20.3	36.6	67%	30%	782	20.3	36.6	67%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2980	2922	2908	2908	31	3%	31	3%	28	2%	31	2%	2196	90%	2202	90%	2090	88%	2166	90%	0.151	11.8	723	20.2	36.5	66%	30%	724	20.2	36.5	66%	30%	685	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	807	791	772	772	0.7	0%	0.7	0%	0.6	0%	0.7	0%	539	11%	555	12%	451	7%	539	11%	<0.01	0.0	93	7	12	0%	4%	96	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	690	362	612	362	14	0%	13.5	1%	11	0%	10.3	0%	454	7%	408	5%	356	3%	309	2%	0.171	13.4	55	20.4	36.8	68%	30%	51.0	20.3	36.8	67%	30%	45.9	20.3	36.7	67%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	466	194	430	194	10	0%	8.0	2%	7	1%	6.35	1%	315	2%	240.3	1%	230.4	1%	192.6	1%	0.055	4.3	38.9	11.1	18.9	1%	10%	30.6	11.0	18.7	1%	10%	29.8	11.0	18.7	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1511	702	1418	702	5	0%	4	0%	3.8	0%	3.5	0%	1175	57%	901	37%	965	42%	896	37%	0.031	2.4	231	10.2	17.1	1%	9%	174	10.0	16.8	1%	9%	188	10.0	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1511	702	1418	702	5	0%	4	0%	3.8	0%	3.5	0%	1175	57%	901	37%	965	42%	896	37%	0.328	25.7	231	33	63	99%	56%	174	33	63	99%	56%	188	33	63	99%	56%
	MU1 Summary																																													
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		7%		6%		3%		3%						2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													0.2%		0.7%		0.1%		0.1%		9.8%		8.9%		3.6%		3.8%						0.1%	4.9%				0.1%	4.8%				0.1%	5.3%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		59%		63%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		32%		34%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		6%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												2%		2%		2%		2%		2%		2%		2%		2%						4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		31%		38%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																													
	d/s Josephine Falls		FO9	9.1					705	413	648	413	14	0%	11	0%	11	0%	11	0%	428	6%	362	4%	362	4%	332	3%	0.034	2.7	58	9.7	16.2	7%	8%	46	9.6	16.0	7%	8%	50	9.6	16.1	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					632	376	582	376	11	0%	9	0%	10	0%	9	0%	367	4%	312	2%	318	2%	292	2%	0.034	2.7	48	10	16	7%	8%	39	9	16	7%	8%	44	10	16	7%	8%
	d/s Line Cr.	LC_LC5	FO23	5.9					632	376	582	376	11	0%	9	0%	10	0%	9	0%	367	4%	312	2%	318	2%	292	2%	0.021	1.6	48	9	14	4%	6%	39	8	14	4%	6%	44	9	14	4%	6%
	Tributaries																																													
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					763	405	622	405	20	1%	17.4	1%	15	1%	13.5	0%	531	11%	462	7%	392	4%	334	3%	<0.01	0.0	90	7	12	2%	4%	78	7	12	2%	4%	66	7	11	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					893	449	756	449	15	0%	13.0	0%	14	0%	12.1	0%	656	18%	576	13%	478	8%	421	5%	0.015	1.2	72	8	14	4%	6%	64	8	14	4%	6%	64	8	14	4%	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					893	449	756	449	15	0%	13	0%	14	0%	12	0%	656	18%	576	13%	478	8%	421	5%	0.018	1.4	72	8.52	14.11	4%	6%	59	8.43	13.94	4%	6%	53	8.37	13.83	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					653	343	597	343	10	0%	8.2	0%	8.8	0%	8.4	0%	470	7%	416	5%	345	3%	319	2%	0.035	2.7	68	10	16	8%	8%	59	10	16	8%	8%	53	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					653	343	597	343	10	0%	8	0%	9	0%	8	0%	470	7%	416	5%	345	3%	319	2%	0.010	0.8	68	7.9	12.9	3%	5%	48	7.7	12.6	3%	5%	45	7.7	12.6	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					577	317	537	317	8.4	0%	6.7	0%	7.6	0%	7.3	0%	386	4%	340	3%	297	2%	278	2%	<0.01	0.0	57	7	11	2%	4%	48	7	11	2%	4%	45	7	11	2%	4%
	MU2 Summary																																													
	Overall % effect (characterized areas)													0%		0%		0%		0%		4%		3%		2%		2%						5%	5%				4%	5%				5%	5%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		95%		97%		100%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		5%		3%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																													
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					247	165	209	165	1.2	0%	1.04	0%	0.85	0%	0.63	0%	85	0%	79	0%	69	0%	55	0%	-	0.0	6.8	6.0	11.0	2%	3%	6.4	6.0	11.0	2%	3%	5.6	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					242	163	205	163	1.1	0%	0.97	0%	0.79	0%	0.58	0%	81	0%	75	0%	66	0%	52	0%	<0.01	0.0	6.3	6.0	11.0	2%	3%	6.0	6.0	11.0	2%	3%	5.3	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					242	163	205	163	1.1	0%	1.0	0%	0.8	0%	0.6	0%	81	0%	75	0%	66	0%	52	0%	-	0.0	6.3	6	11	2%	3%	6.0	6	11	2%	3%	5.3	6	11	2%	3%
	u/s Fording R.		ELUFO	13					242	163	205	163	1.1	0%	1.0	0%	0.8	0%	0.6	0%	81	0%	75	0%	66	0%	52	0%	-	0.0	6.3	6.0	11.0	2%	3%	6.0	6.0	11.0	2%	3%	5.3	5.9	11.0	2%	3%
	Tributaries																																													
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2918	2108	2756	2108	92	47%	67	24%	73	30%	71	28%	2143	89%	1680	80%	1874	85%	1800	83%	0.128	10.0	329	18	32	55%	25%	254	18

Table A-6: Integrated Effects Table for Fish - 2026

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
	Mainstem Fording River																																															
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	20	6.48	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	20	6.48	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89					345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	20	6.48	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					345	190	257	190	2.7	0%	2.3	0%	1.2	0%	1.4	0%	247	1%	211	1%	138	0%	128	0%	<0.01	0.0	38	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	20	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					810	351	655	351	11	0%	9	0%	7	0%	6	0%	555	12%	456	7%	362	4%	327	3%	<0.01	0.0	45	7	11	0%	4%	36	7	11	0%	4%	34	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					810	351	655	351	11	0%	9	0%	7	0%	6	0%	555	12%	456	7%	362	4%	327	3%	<0.01	0.0	45	6.9	11.1	0%	4%	36	6.8	11.0	0%	4%	34	6.7	11.0	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					810	351	655	351	11	0%	9	0%	7	0%	6	0%	555	12%	456	7%	362	4%	327	3%	0.012	0.9	45	7.8	12.8	0%	5%	36	7.7	12.6	0%	5%	34	7.7	12.6	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	977	388	772	388	10	0%	9	0%	7	0%	6	0%	712	22%	583	13%	461	7%	410	5%	0.022	1.7	45	9	14	0%	6%	36	8	14	0%	6%	38	9	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					975	432	775	432	12	0%	10	0%	8	0%	7	0%	707	22%	583	13%	463	7%	412	5%	0.025	2.0	51	9	15	0%	7%	41	9	15	0%	7%	42	9	15	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					975	432	775	432	12	0%	10	0%	8	0%	7	0%	707	22%	583	13%	463	7%	412	5%	0.025	2.0	51	8.9	14.8	0%	7%	41	8.8	14.6	0%	7%	42	8.8	14.6	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					975	432	775	432	12	0%	10	0%	8	0%	7	0%	707	22%	583	13%	463	7%	412	5%	<0.01	0.0	51	6.9	11.3	0%	4%	41	6.8	11.1	0%	4%	42	6.8	11.1	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	898	604	741	604	17	0%	16	0%	14	0%	12	0%	588	14%	585	14%	461	7%	399	5%	<0.01	0.0	69	7	12	0%	4%	67	7	11	0%	4%	59	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					876	582	724	582	17	0%	16	0%	13	0%	12	0%	570	13%	556	12%	450	7%	382	4%	0.012	0.9	67	8	13	0%	5%	63	8	13	0%	5%	57	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	876	582	724	582	17	0%	16	0%	13	0%	12	0%	570	13%	556	12%	450	7%	382	4%	<0.01	0.0	67	7.1	11.5	0%	4%	63	7.0	11.4	0%	4%	57	7.0	11.4	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	876	582	724	582	17	0%	16	0%	13	0%	12	0%	570	13%	556	12%	450	re	382	4%	0.028	2.2	67	9.3	15.5	0%	7%	63	9.2	15.4	0%	7%	57	9.2	15.3	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	876	582	724	582	17	0%	16	0%	13	0%	12	0%	570	13%	556	12%	450	7%	382	4%	0.029	2.3	67	9.3	15.6	0%	7%	63	9.3	15.6	0%	7%	57	9.3	15.5	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	713	405	653	405	12	0%	9	0%	11	0%	10	0%	434	6%	353	3%	368	4%	336	3%	0.033	2.6	54	10	16	0%	8%	41	9	16	0%	8%	48	9	16	0%	8%
	Tributaries																																															-
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
MU1	*Other reference tributaries*		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	384	224	286	224	3	0%	4	0%	1.6	0%	3.0	0%	292	2%	313	2%	171	0%	273	2%	0.026	2.0	46	9	15	0%	7%	49	9	15	0%	7%	25	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1408	1084	1391	1084	11	0%	11	0%	11	0%	11	0%	857	34%	680	20%	818	31%	779	27%	0.031	2.4	17	9	15	0%	6%	19	9	15	0%	6%	17	9	15	0%	6%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	1993	1409	1929	1409	91.6	47%	78.1	35%	75.5	32%	74.0	31%	1236	61%	1084	51%	1122	54%	1085	51%	-	0.0	324	8	13	0%	5%	282	8	13	0%	5%	289	8	13	0%	5%
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1896	658	1436	658	117	67%	91	46%	63	21%	52	13%	1494	73%	1305	65%	1027	47%	832	32%	<0.01	0.0	440	8	13	0%	5%	346	8	13	0%	5%	241	8	13	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	3007	2822	2874	2822	31	2%	28	2%	29	2%	28	2%	2216	90%	2154	89%	2103	89%	2039	88%	0.151	11.8	814	20.3	36.6	67%	30%	790	20.3	36.6	67%	30%	786	20.3	36.6	67%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2955	2920	2908	2908	28	2%	28	2%	26	1%	27	2%	2168	90%	2173	90%	2082	88%	2146	89%	0.151	11.8	710	20.2	36.5	66%	30%	711	20.2	36.5	66%	30%	679	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	806	793	771	771	0.6	0%	0.6	0%	0.5	0%	0.6	0%	537	11%	555	12%	450	7%	536	11%	<0.01	0.0	92	7	12	0%	4%	95	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	693	343	616	343	14	0%	11.4	1%	11	0%	9.9	0%	458	7%	377	4%	355	3%	312	2%	0.171	13.4	55	20.4	36.8	68%	30%	45.0	20.3	36.6	67%	30%	46.0	20.3	36.7	67%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	477	193	439	193	10	0%	6.8	1%	7	1%	6.23	1%	327	3%	218.6	1%	240.3	1%	199.0	1%	0.055	4.3	39.2	11.1	18.9	1%	10%	27.2	10.9	18.6	1%	10%	31.0	11.0	18.7	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1504	722	1404	722	4	0%	3	0%	3.1	0%	2.9	0%	1173	57%	835	32%	962	42%	889	36%	0.031	2.4	229	10.1	17.1	1%	9%	158	9.9	16.7	1%	9%	186	10.0	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1504	722	1404	722	4	0%	3	0%	3.1	0%	2.9	0%	1173	57%	835	32%	962	42%	889	36%	0.328	25.7	229	33	63	99%	56%	158	33	63	99%	56%	186	33	63	99%	56%
	MU1 Summary																																															
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		7%		5%		3%		3%							2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													0.2%		0.5%		0.1%		0.1%		9.8%		8.2%		3.6%		3.7%							0.1%	4.8%				0.1%	4.7%				0.1%	5.3%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		59%		63%		92%		96%							97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		32%		34%		0%		0%							0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		6%		2%		2%		2%							0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%							2%	0%				2%	0%				2%	0%
		Uncharacterized areas												2%		2%		2%		2%		2%		2%		2%		2%							4%	2%				4%	2%				4%	2%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		31%		38%		91%		100%							100%	100%				100%	100%				100%	100%
	Mainstem Fording River																																															
	d/s Josephine Falls		FO9	9.1					713	405	653	405	12	0%	9	0%	11	0%	10	0%	434	6%	353	3%	368	4%	336	3%	0.034	2.7	54	9.6	16.1	7%	8%	41	9.5	15.9	7%	8%	48	9.6	16.0	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					628	370	578	370	9	0%	7	0%	8	0%	8	0%	348	3%	277	2%	311	2%	285	2%	0.034	2.7	41	9	16	7%	7%	33	9	16	7%	7%	39	9	16	7%	7%
	d/s Line Cr.	LC_LC5	FO23	5.9					628	370	578	370	9	0%	7	0%	8	0%	8	0%	348	3%	277	2%	311	2%	285	2%	0.021	1.6	41	8	14	4%	6%	33	8	14	4%	6%	39	8	14	4%	6%
	Tributaries																																															
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					800	354	752	354	14	0%	11.7	0%	13	1%	12.6	1%	542	11%	447	6%	493	9%	425	6%	<0.01	0.0	89	7	12	2%	4%	72	7	12	2%	4%	84	7	12	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					817	402	700	402	6	0%	5.6	0%	6	0%	6.0	0%	437	6%	350	3%	382	4%	326	3%	0.015	1.2	34	8	13	3%	5%	31	8	13	3%	5%	34	8	13	3%	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					817	402	700	402	6	0%	6	0%	6	0%	6	0%	437	6%	350	3%	382	4%	326	3%	0.018	1.4	34	8.16	13.45	4%	5%	31	8.11	13.36	4%	5%	35	8.16	13.46	4%	5%
MU2	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					614	314	560	314	4	0%	3.9	0%	4.0	0%	4.0	0%	332	3%	263	1%	282	2%	253	1%	0.035	2.7	37	10	16	7%	8%	31	9	16	7%	8%	35	9	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					614	314	560	314	4	0%	4	0%	4	0%	4	0%	332	3%	263	1%	282	2%	253	1%	0.010	0.8	37	7.6	12.4	3%	5%	27	7.4	12.1	2%	5%	30	7.5	12.2	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					540	293	506	293	3.0	0%	3.5	0%	3.4	0%	3.5	0%	282	2%	221	1%	244	1%	222	1%	<0.01	0.0	33	7	11	2%	4%	27	7	11	2%	4%	30	7	11	2%	4%
	MU2 Summary																																															
	Overall % effect (characterized areas)													0%		0%		0%		0%		3%		2%		2%		1%							5%	5%				4%	5%				4%	5%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		98%		100%		100%		100%							100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		2%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%							0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%							100%	100%				100%	100%				100%	100%
	Mainstem Elk River																																															
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					247	164	207	164	1.0	0%	0.9	0%	0.71	0%	0.52	0%	85	0%	79	0%	69	0%	54	0%	-	0.0	6.6	6.0	11.0	2%	3%	6.2	6.0	11.0	2%	3%	5.3	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					242	163	204	163	0.9	0%	0.84	0%	0.66	0%	0.48	0%	81	0%	75	0%	65	0%	51	0%	<0.01	0.0	6.2	6.0	11.0	2%	3%	5.9	6.0	11.0	2%	3%	5.0	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					242	163	204	163	0.9	0%	0.8	0%	0.7	0%	0.5	0%	81	0%	75	0%	65	0%	51	0%	-	0.0	6.2	6	11	2%	3%	5.9	6	11	2%	3%	5.0	6	11	2%	3%
	u/s Fording R.		ELUFO	13					242	163	204	163	0.9	0%	0.8	0%	0.7	0%	0.5	0%	81	0%	75	0%	65	0%	51	0%	-	0.0	6.2	6.0	11.0	2%	3%	5.9	6.0	11.0	2%	3%	5.0	5.9	11.0	2%	3%
	Tributaries																																															
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MU3	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2885	2109	2733	2160	79	36%	57	16%	61	19%	60	18%	2179	90%	1692	80%	1890	85%	1820	83%	0.128

Table A-7: Integrated Effects Table for Fish - 2027

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use				Hardness (mg/L as $CaCO_3$)				Nitrate - Winter		Nitrate - Spring		Nitrate - Summer-Fall		Nitrate - ELS		Sulphate - Winter		Sulphate - Spring		Sulphate - Summer/Fall		Sulphate - ELS		Organoselenium		Selenium - Winter					Selenium - Spring					Selenium - Summer/Fall				
					Adults Winter	Adults Spring	Adults Summer-Fall	Spawning	Winter	Spring	Summer-Fall	ELS	[NO_3] (mg/L N)	Sensitive Species	[NO_3] (mg/L N)	Sensitive Species	[NO_3] (mg/L N)	Sensitive Species	[NO_3] (mg/L N)	Sensitive Species	[SO_4] (mg/L)	Sensitive Species	[SO_4] (mg/L)	Sensitive Species	[SO_4] (mg/L)	Sensitive Species	[SO_4] (mg/L)	Sensitive Species	Max. 2021 OrganoSe (µg/L)	Modelled Bl Se Increment (mg/kg dw)	[Se] (µg/L)	Modelled Bl Se (mg/kg dw)	Modelled Fish egg Se (mg/kg dw)	Fish Repro-duction	Juvenile Growth	[Se] (µg/L)	Modelled Bl Se (mg/kg dw)	Modelled Fish egg Se (mg/kg dw)	Fish Repro-duction	Juvenile Growth	[Se] (µg/L)	Modelled Bl Se (mg/kg dw)	Modelled Fish egg Se (mg/kg dw)	Fish Repro-duction	Juvenile Growth
MU1	**Mainstem Fording River**																																													
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	19	6.47	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	19	6.47	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89					340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.79	11.01	0%	4%	32	6.71	11.0	0%	4%	19	6.47	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					340	192	253	192	2.2	0%	1.9	0%	1.0	0%	1.1	0%	248	1%	213	1%	137	0%	129	0%	<0.01	0.0	37	6.8	11.0	0%	4%	32	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					833	350	663	350	10	0%	9	0%	7	0%	6	0%	574	13%	474	8%	382	4%	333	3%	<0.01	0.0	44	7	11	0%	4%	36	7	11	0%	4%	31	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					833	350	663	350	10	0%	9	0%	7	0%	6	0%	574	13%	474	8%	382	4%	333	3%	<0.01	0.0	44	6.9	11.1	0%	4%	36	6.8	11.0	0%	4%	31	6.7	11.0	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					833	350	663	350	10	0%	9	0%	7	0%	6	0%	574	13%	474	8%	382	4%	333	3%	0.012	0.9	44	7.8	12.8	0%	5%	36	7.7	12.6	0%	5%	31	7.6	12.5	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	994	383	776	383	10	0%	9	0%	7	0%	6	0%	598	14%	493	9%	421	5%	366	4%	0.022	1.7	44	9	14	0%	6%	35	8	14	0%	6%	36	8	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					991	430	778	430	11	0%	10	0%	7	0%	7	0%	601	15%	496	9%	423	6%	369	4%	0.025	2.0	49	9	15	0%	6%	39	9	15	0%	6%	39	9	15	0%	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					991	430	778	430	11	0%	10	0%	7	0%	7	0%	601	15%	496	9%	423	6%	369	4%	0.025	2.0	49	8.9	14.8	0%	6%	39	8.8	14.6	0%	6%	39	8.8	14.6	0%	6%
	u/s Porter	FR_FRRD	FRUPO	2.2					991	430	778	430	11	0%	10	0%	7	0%	7	0%	601	15%	496	9%	423	6%	369	4%	<0.01	0.0	49	6.9	11.2	0%	4%	39	6.8	11.0	0%	4%	39	6.8	11.0	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	908	606	740	606	16	0%	14	0%	11	0%	11	0%	534	11%	531	11%	427	6%	376	4%	<0.01	0.0	66	7	11	0%	4%	59	7	11	0%	4%	52	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					886	588	722	588	15	0%	14	0%	11	0%	10	0%	520	10%	507	9%	417	5%	355	3%	0.012	0.9	64	8	13	0%	5%	56	8	13	0%	5%	50	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	886	588	722	588	15	0%	14	0%	11	0%	10	0%	520	10%	507	9%	417	5%	355	3%	<0.01	0.0	64	7.0	11.5	0%	4%	56	7.0	11.3	0%	4%	50	6.9	11.2	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	886	588	722	588	15	0%	14	0%	11	0%	10	0%	520	10%	507	9%	417	re	355	3%	0.028	2.2	64	9.2	15.4	0%	7%	56	9.2	15.3	0%	7%	50	9.1	15.2	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	886	588	722	588	15	0%	14	0%	11	0%	10	0%	520	10%	507	9%	417	5%	355	3%	0.029	2.3	64	9.3	15.6	0%	7%	56	9.3	15.5	0%	7%	50	9.2	15.4	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	722	410	656	410	11	0%	9	0%	9	0%	9	0%	415	5%	337	3%	352	3%	319	2%	0.033	2.6	52	10	16	0%	8%	38	9	16	0%	8%	45	9	16	0%	8%
	Tributaries																																													-
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	382	222	283	222	3	0%	3	0%	1.3	0%	2.5	0%	291	2%	313	2%	173	0%	277	2%	0.026	2.0	45	9	15	0%	7%	49	9	15	0%	7%	26	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1432	955	1420	955	11	0%	10	0%	11	0%	10	0%	865	34%	690	21%	820	31%	769	27%	0.031	2.4	18	9	15	0%	7%	17	9	15	0%	7%	19	9	15	0%	7%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1873	670	1427	670	37	4%	31	2%	34	4%	34	3%	981	43%	863	34%	808	30%	660	19%	<0.01	0.0	147	7	12	0%	5%	122	7	12	0%	5%	142	7	12	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	3075	2912	2961	2912	33	3%	32	3%	32	3%	31	2%	2228	90%	2192	90%	2157	89%	2100	89%	0.151	11.8	844	20.3	36.7	67%	30%	828	20.3	36.7	67%	30%	823	20.3	36.6	67%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	2987	2939	2935	2935	25	1%	25	1%	24	1%	25	1%	2159	89%	2157	89%	2123	89%	2140	89%	0.151	11.8	702	20.2	36.5	66%	30%	703	20.2	36.5	66%	30%	691	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	804	794	770	770	0.5	0%	0.5	0%	0.4	0%	0.5	0%	536	11%	554	12%	450	7%	537	11%	<0.01	0.0	92	7	12	0%	4%	95	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	696	363	615	363	12	0%	10.4	0%	9	0%	8.5	0%	419	5%	350	3%	328	3%	291	2%	0.171	13.4	49	20.3	36.7	67%	30%	41.6	20.2	36.6	67%	30%	39.9	20.2	36.5	66%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	488	193	444	193	9	0%	6.4	1%	6	1%	5.4	1%	305	2%	213.1	1%	228.9	1%	188.8	0%	0.055	4.3	36.6	11.1	18.9	1%	10%	26.2	10.9	18.6	1%	10%	25.9	10.9	18.5	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1492	711	1391	711	4	0%	3	0%	2.6	0%	2.4	0%	1172	57%	845	33%	965	42%	881	36%	0.031	2.4	227	10.1	17.1	1%	9%	159	10.0	16.7	1%	9%	186	10.0	16.9	1%	9%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1492	711	1391	711	4	0%	3	0%	2.6	0%	2.4	0%	1172	57%	845	33%	965	42%	881	36%	0.328	25.7	227	33	63	99%	56%	159	33	63	99%	56%	186	33	63	99%	56%
	MU1 Summary																																													
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		6%		4%		3%		2%						2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													0.1%		0.1%		0.1%		0.1%		7.5%		6.6%		3.0%		3.1%						0.1%	4.8%				0.1%	4.7%				0.1%	5.3%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		86%		95%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		11%		2%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												17%		17%		17%		17%		17%		17%		17%		17%						19%	17%				19%	17%				19%	17%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		80%		97%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																													
	d/s Josephine Falls		FO9	9.1					722	410	656	410	11	0%	9	0%	9	0%	9	0%	415	5%	337	3%	352	3%	319	2%	0.034	2.7	52	9.6	16.1	7%	8%	38	9.5	15.8	7%	8%	45	9.5	16.0	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					636	381	582	381	8	0%	6	0%	7	0%	7	0%	347	3%	272	1%	299	2%	275	2%	0.034	2.7	39	9	16	7%	7%	31	9	16	6%	7%	37	9	16	7%	7%
	d/s Line Cr.	LC_LC5	FO23	5.9					636	381	582	381	8	0%	6	0%	7	0%	7	0%	347	3%	272	1%	299	2%	275	2%	0.021	1.6	39	8	14	4%	6%	31	8	14	4%	6%	37	8	14	4%	6%
	Tributaries																																													
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					895	379	770	379	14	0%	12.5	0%	12	0%	12.0	0%	584	14%	534	11%	518	10%	444	6%	<0.01	0.0	96	7	12	2%	4%	87	7	12	2%	4%	86	7	12	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					840	423	722	423	6	0%	7.0	0%	6	0%	7.0	0%	496	9%	404	5%	403	5%	344	3%	0.015	1.2	36	8	13	3%	5%	39	8	13	3%	5%	35	8	13	3%	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					840	423	722	423	6	0%	7	0%	6	0%	7	0%	496	9%	404	5%	403	5%	344	3%	0.018	1.4	36	8.17	13.48	4%	5%	33	8.13	13.41	4%	5%	35	8.17	13.47	4%	5%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					634	329	574	329	3	0%	3.8	0%	3.7	0%	3.8	0%	369	4%	298	2%	302	2%	266	1%	0.035	2.7	38	10	16	7%	8%	33	9	16	7%	8%	35	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					634	329	574	329	3	0%	4	0%	4	0%	4	0%	369	4%	298	2%	302	2%	266	1%	0.010	0.8	38	7.6	12.4	3%	5%	27	7.4	12.1	2%	5%	30	7.5	12.2	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					556	306	517	306	2.8	0%	3.4	0%	3.1	0%	3.4	0%	306	2%	246	1%	261	1%	231	1%	<0.01	0.0	32	7	11	2%	4%	27	7	11	2%	4%	30	7	11	2%	4%
	MU2 Summary																																													
	Overall % effect (characterized areas)													0%		0%		0%		0%		3%		2%		2%		1%						4%	5%				4%	5%				4%	5%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		98%		98%		100%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		2%		2%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																													
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					249	165	208	165	0.9	0%	0.8	0%	0.67	0%	0.47	0%	86	0%	80	0%	72	0%	55	0%	-	0.0	6.6	6.0	11.0	2%	3%	6.3	6.0	11.0	2%	3%	5.5	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					243	163	204	163	0.8	0%	0.75	0%	0.62	0%	0.43	0%	82	0%	76	0%	68	0%	52	0%	<0.01	0.0	6.2	6.0	11.0	2%	3%	5.9	6.0	11.0	2%	3%	5.1	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					243	163	204	163	0.8	0%	0.7	0%	0.6	0%	0.4	0%	82	0%	76	0%	68	0%	52	0%	-	0.0	6.2	6	11	2%	3%	5.9	6	11	2%	3%	5.1	6	11	2%	3%
	u/s Fording R.		ELUFO	13					243	163	204	163	0.8	0%	0.7	0%	0.6	0%	0.4	0%	82	0%	76	0%	68	0%	52	0%	-	0.0	6.2	6.0	11.0	2%	3%	5.9	6.0	11.0	2%	3%	5.1	5.9	11.0	2%	3%
	Tributaries																																													
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2812	2127	2707	2133	65	23%	46	9%	50	11%	50	11%	2174	90%	1687	80%	1890	85%	1833	84%	0.128	10.0	307	18	32	55%	24%	235	18	32	54%	24%	261	18	32	54%	24%
	Wolfram Cr.	GH_WC2	WOCK	0.12					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0					1942	1076	1927	1171	10	0%	7	0%	8	0%	8	0%	1671	80%	1232	60%	1436	71%	1384	69%	0.606	47.5	265	55	110	99%	79%	194	55	110	99%	79%

Table A-8: Integrated Effects Table for Fish - 2028

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled Bl Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled Bl Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled Bl Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled Bl Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																													
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.8	11.0	0%	4%	30	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.76	11.0	0%	4%	30	6.69	11.0	0%	4%	19	6.47	10.99	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.8	11.0	0%	4%	30	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.76	11.0	0%	4%	30	6.69	11.0	0%	4%	19	6.47	10.99	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	20%	20%	12%	12%	345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.76	11.0	0%	4%	30	6.69	11.0	0%	4%	19	6.47	10.99	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					345	193	256	193	1.8	0%	1.5	0%	0.8	0%	0.9	0%	240	1%	206	1%	138	0%	129	0%	<0.01	0.0	36	6.8	11.0	0%	4%	30	6.7	11.0	0%	4%	19	6.5	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					882	366	707	366	10	0%	9	0%	7	0%	6	0%	594	14%	496	9%	407	5%	363	4%	<0.01	0.0	45	7	11	0%	4%	37	7	11	0%	4%	34	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					882	366	707	366	10	0%	9	0%	7	0%	6	0%	594	14%	496	9%	407	5%	363	4%	<0.01	0.0	45	6.9	11.2	0%	4%	37	6.8	11.0	0%	4%	34	6.7	11.0	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					882	366	707	366	10	0%	9	0%	7	0%	6	0%	594	14%	496	9%	407	5%	363	4%	0.012	0.9	45	7.8	12.8	0%	5%	37	7.7	12.7	0%	5%	34	7.7	12.6	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	1035	404	820	404	10	0%	9	0%	7	0%	6	0%	622	16%	513	10%	446	6%	397	5%	0.022	1.7	45	9	14	0%	6%	37	9	14	0%	6%	39	9	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					1029	449	818	449	11	0%	9	0%	7	0%	7	0%	621	16%	511	9%	445	6%	397	5%	0.025	2.0	47	9	15	0%	6%	38	9	15	0%	6%	40	9	15	0%	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					1029	449	818	449	11	0%	9	0%	7	0%	7	0%	621	16%	511	9%	445	6%	397	5%	0.025	2.0	47	8.9	14.7	0%	6%	38	8.8	14.5	0%	6%	40	8.8	14.6	0%	6%
	u/s Porter	FR_FRRD	FRUPO	2.2					1029	449	818	449	11	0%	9	0%	7	0%	7	0%	621	16%	511	9%	445	6%	397	5%	<0.01	0.0	47	6.9	11.2	0%	4%	38	6.8	11.0	0%	4%	40	6.8	11.0	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	925	606	759	606	13	0%	12	0%	10	0%	10	0%	526	10%	525	10%	432	6%	380	4%	<0.01	0.0	54	7	11	0%	4%	50	7	11	0%	4%	49	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					903	581	741	581	12	0%	11	0%	10	0%	9	0%	511	9%	500	9%	421	5%	363	4%	0.012	0.9	52	8	13	0%	5%	48	8	13	0%	5%	48	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	903	581	741	581	12	0%	11	0%	10	0%	9	0%	511	9%	500	9%	421	5%	363	4%	<0.01	0.0	52	7.0	11.3	0%	4%	48	6.9	11.2	0%	4%	48	6.9	11.2	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	903	581	741	581	12	0%	11	0%	10	0%	9	0%	511	9%	500	9%	421	re	363	4%	0.028	2.2	52	9.1	15.3	0%	7%	48	9.1	15.2	0%	7%	48	9.1	15.2	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	903	581	741	581	12	0%	11	0%	10	0%	9	0%	511	9%	500	9%	421	5%	363	4%	0.029	2.3	52	9.2	15.4	0%	7%	48	9.2	15.3	0%	7%	48	9.2	15.3	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	744	414	683	414	10	0%	7	0%	9	0%	9	0%	405	5%	324	3%	354	3%	331	3%	0.033	2.6	41	9	16	0%	7%	36	9	16	0%	7%	44	9	16	0%	7%
	Tributaries																																													
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	383	224	285	224	2	0%	2	0%	1.1	0%	2.1	0%	292	2%	314	2%	171	0%	281	2%	0.026	2.0	45	9	15	0%	7%	49	9	15	0%	7%	25	9	14	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	1521	1009	1497	1009	11	0%	11	0%	11	0%	11	0%	891	36%	715	23%	883	36%	839	32%	0.031	2.4	20	9	15	0%	7%	18	9	15	0%	7%	21	9	15	0%	7%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1892	683	1425	683	33	3%	27	2%	31	3%	30	2%	974	43%	845	33%	796	29%	662	19%	<0.01	0.0	148	7	12	0%	5%	123	7	12	0%	5%	144	7	12	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	3072	2944	2973	2944	33	3%	32	3%	29	2%	29	2%	2259	91%	2222	90%	2165	90%	2116	89%	0.151	11.8	864	20.3	36.7	67%	30%	845	20.3	36.7	67%	30%	827	20.3	36.7	67%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	3005	2967	2960	2960	24	1%	24	1%	23	1%	24	1%	2194	90%	2199	90%	2136	89%	2184	90%	0.151	11.8	713	20.2	36.5	66%	30%	715	20.2	36.5	66%	30%	693	20.2	36.4	66%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	804	788	769	769	0.4	0%	0.4	0%	0.3	0%	0.4	0%	537	11%	554	12%	450	7%	538	11%	<0.01	0.0	92	7	12	0%	4%	95	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	724	389	636	389	10	0%	8.0	0%	9	0%	8.0	0%	412	5%	339	3%	335	3%	301	2%	0.171	13.4	43	20.3	36.6	67%	30%	33.0	20.1	36.3	66%	30%	40.3	20.2	36.5	66%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	527	217	472	217	7	0%	4.7	0%	6	0%	5.23	0%	308	2%	190.1	1%	236.7	1%	205.0	1%	0.055	4.3	31.3	11.0	18.7	1%	10%	19.8	10.8	18.3	1%	10%	27.4	11.0	18.6	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1536	717	1468	717	2	0%	1	0%	1.4	0%	1.4	0%	1166	56%	842	32%	940	40%	873	35%	0.031	2.4	75	9.6	16.0	0%	8%	73	9.5	16.0	0%	8%	78	9.6	16.1	0%	8%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1536	717	1468	717	2	0%	1	0%	1.4	0%	1.4	0%	1166	56%	842	32%	940	40%	873	35%	0.328	25.7	75	33	62	99%	55%	73	33	62	99%	55%	78	33	62	99%	55%
	MU1 Summary																																													
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		6%		4%		3%		2%						2%	4%				2%	4%				2%	4%
	Overall % effect by use (characterized areas)													0.1%		0.1%		0.0%		0.1%		7.6%		6.7%		3.2%		3.4%						0.1%	4.7%				0.1%	4.6%				0.1%	5.2%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		86%		95%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		11%		2%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												17%		17%		17%		17%		17%		17%		17%		17%						19%	17%				19%	17%				19%	17%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		80%		97%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																													
	d/s Josephine Falls		FO9	9.1					744	414	683	414	10	0%	7	0%	9	0%	9	0%	405	5%	324	3%	354	3%	331	3%	0.034	2.7	41	9.5	15.9	7%	7%	36	9.4	15.8	7%	7%	44	9.5	16.0	7%	7%
	d/s Grace Cr.	LC_LC6	FRUL	15					654	384	599	384	7	0%	6	0%	7	0%	7	0%	343	3%	264	1%	305	2%	283	2%	0.034	2.7	33	9	16	7%	7%	31	9	16	6%	7%	36	9	16	7%	7%
	d/s Line Cr.	LC_LC5	FO23	5.9					654	384	599	384	7	0%	6	0%	7	0%	7	0%	343	3%	264	1%	305	2%	283	2%	0.021	1.6	33	8	14	4%	6%	31	8	14	4%	6%	36	8	14	4%	6%
	Tributaries																																													
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					904	380	784	380	13	0%	11.0	0%	11	0%	10.7	0%	609	15%	555	12%	530	10%	467	7%	<0.01	0.0	100	7	12	2%	4%	90	7	12	2%	4%	87	7	12	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					871	436	758	436	5	0%	5.4	0%	5	0%	5.4	0%	521	10%	424	6%	420	5%	365	4%	0.015	1.2	34	8	13	3%	5%	38	8	13	3%	5%	34	8	13	3%	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					871	436	758	436	5	0%	5	0%	5	0%	5	0%	521	10%	424	6%	420	5%	365	4%	0.018	1.4	34	8.15	13.44	4%	5%	33	8.14	13.42	4%	5%	36	8.18	13.49	4%	5%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					656	333	591	333	3	0%	3.5	0%	3.4	0%	3.5	0%	384	4%	312	2%	317	2%	277	2%	0.035	2.7	40	10	16	7%	8%	33	9	16	7%	8%	36	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					656	333	591	333	3	0%	3	0%	3	0%	3	0%	384	4%	312	2%	317	2%	277	2%	0.010	0.8	40	7.6	12.4	3%	5%	28	7.4	12.1	2%	5%	31	7.5	12.2	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					573	309	529	309	2.5	0%	3.0	0%	2.8	0%	3.0	0%	316	2%	254	1%	270	1%	242	1%	<0.01	0.0	33	7	11	2%	4%	28	7	11	2%	4%	31	7	11	2%	4%
	MU2 Summary																																													
	Overall % effect (characterized areas)													0%		0%		0%		0%		3%		2%		2%		2%						4%	5%				4%	5%				4%	5%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		98%		98%		98%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		2%		2%		2%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																													
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					223	160	192	160	0.7	0%	0.59	0%	0.46	0%	0.32	0%	77	0%	71	0%	56	0%	44	0%	-	0.0	5.8	5.9	11.0	2%	3%	5.1	5.9	11.0	2%	3%	4.3	5.8	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					220	159	190	159	0.7	0%	0.55	0%	0.43	0%	0.3	0%	73	0%	67	0%	53	0%	42	0%	<0.01	0.0	5.5	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%	4.0	5.8	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					220	159	190	159	0.7	0%	0.5	0%	0.4	0%	0.3	0%	73	0%	67	0%	53	0%	42	0%	-	0.0	5.5	6	11	2%	3%	4.8	6	11	2%	3%	4.0	6	11	2%	3%
	u/s Fording R.		ELUFO	13					220	159	190	159	0.7	0%	0.5	0%	0.4	0%	0.3	0%	73	0%	67	0%	53	0%	42	0%	-	0.0	5.5	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%	4.0	5.8	11.0	2%	3%
	Tributaries																																													
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					2901	2045	2736	2147	56	15%	45	8%	51	12%	49	10%	2188	90%	1733	81%	1934	86%	1859	84%	0.128	10.0	299	18	32	55%	24%	239	18	32	54%	24%	267	18	32	54%	24%
	Wolfram Cr.	GH_WC2	WOCK	0.12					-

Table A-9: Integrated Effects Table for Fish – 2029-2053

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Fish Habitat (ha)	Relative Fish Use: Adults Winter	Relative Fish Use: Adults Spring	Relative Fish Use: Adults Summer-Fall	Relative Fish Use: Spawning	Hardness (mg/L as $CaCO_3$): Winter	Hardness: Spring	Hardness: Summer-Fall	Hardness: ELS	Nitrate - Winter: $[NO_3]$ (mg/L N)	Nitrate - Winter: Sensitive Species	Nitrate - Spring: $[NO_3]$ (mg/L N)	Nitrate - Spring: Sensitive Species	Nitrate - Summer-Fall: $[NO_3]$ (mg/L N)	Nitrate - Summer-Fall: Sensitive Species	Nitrate - ELS: $[NO_3]$ (mg/L N)	Nitrate - ELS: Sensitive Species	Sulphate - Winter: $[SO_4]$ (mg/L)	Sulphate - Winter: Sensitive Species	Sulphate - Spring: $[SO_4]$ (mg/L)	Sulphate - Spring: Sensitive Species	Sulphate - Summer/Fall: $[SO_4]$ (mg/L)	Sulphate - Summer/Fall: Sensitive Species	Sulphate - ELS: $[SO_4]$ (mg/L)	Sulphate - ELS: Sensitive Species	Organoselenium: Max. 2021 OrganoSe (µg/L)	Organoselenium: Modelled BI Se Increment (mg/kg dw)	Selenium - Winter: [Se] (µg/L)	Selenium - Winter: Modelled BI Se (mg/kg dw)	Selenium - Winter: Modelled Fish egg Se (mg/kg dw)	Selenium - Winter: Fish Repro-duction	Selenium - Winter: Juvenile Growth	Selenium - Spring: [Se] (µg/L)	Selenium - Spring: Modelled BI Se (mg/kg dw)	Selenium - Spring: Modelled Fish egg Se (mg/kg dw)	Selenium - Spring: Fish Repro-duction	Selenium - Spring: Juvenile Growth	Selenium - Summer/Fall: [Se] (µg/L)	Selenium - Summer/Fall: Modelled BI Se (mg/kg dw)	Selenium - Summer/Fall: Modelled Fish egg Se (mg/kg dw)	Selenium - Summer/Fall: Fish Repro-duction	Selenium - Summer/Fall: Juvenile Growth
MU1	**Mainstem Fording River**																																															
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*7.4*	*3.8%*	*7.7%*	*7.0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	3.4%	10%	7.0%	12%	377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.9	11.2	0%	4%	42	6.8	11.1	0%	4%	24	6.6	11.0	0%	4%
	u/s Clode Cr.		FOUCL	0.23					377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.89	11.17	0%	4%	42	6.84	11.09	0%	4%	24	6.57	11.0	0%	4%
	u/s North Greenhills Diversion		FOUNGD	1.4					377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.9	11.2	0%	4%	42	6.8	11.1	0%	4%	24	6.6	11.0	0%	4%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56					377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.89	11.17	0%	4%	42	6.84	11.09	0%	4%	24	6.57	11.0	0%	4%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89					377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.89	11.17	0%	4%	42	6.84	11.09	0%	4%	24	6.57	11.0	0%	4%
	u/s Shandley Cr.		FOUSH	1.5					377	206	278	206	3.3	0%	2.8	0%	1.6	0%	1.7	0%	292	2%	270	1%	160	0%	152	0%	<0.01	0.0	46	6.9	11.2	0%	4%	42	6.8	11.1	0%	4%	24	6.6	11.0	0%	4%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92					1023	418	840	418	11	0%	10	0%	7	0%	6	0%	681	20%	580	13%	468	7%	411	5%	<0.01	0.0	72	7	12	0%	4%	66	7	11	0%	4%	50	7	11	0%	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5					1023	418	840	418	11	0%	10	0%	7	0%	6	0%	681	20%	580	13%	468	7%	411	5%	<0.01	0.0	72	7.1	11.6	0%	4%	66	7.1	11.5	0%	4%	50	6.9	11.2	0%	4%
	d/s future AWTF-S		SCOUTDS	0.066					1023	418	840	418	11	0%	10	0%	7	0%	6	0%	681	20%	580	13%	468	7%	411	5%	0.012	0.9	72	8.0	13.3	0%	5%	66	8.0	13.2	0%	5%	50	7.9	12.9	0%	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.68	2.7%	3.1%	10%	1.3%	1164	452	934	452	10	0%	10	0%	7	0%	6	0%	708	22%	592	14%	503	9%	441	6%	0.022	1.7	69	9	15	0%	6%	63	9	15	0%	6%	57	9	14	0%	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4					1140	491	923	491	11	0%	10	0%	7	0%	7	0%	700	21%	584	14%	499	9%	437	6%	0.025	2.0	68	9	15	0%	7%	62	9	15	0%	7%	57	9	15	0%	7%
	1 km SW of Fording R Compliance		FRCP1SW	1.4					1140	491	923	491	11	0%	10	0%	7	0%	7	0%	700	21%	584	14%	499	9%	437	6%	0.025	2.0	68	9.0	15.1	0%	7%	62	9.0	15.0	0%	7%	57	9.0	14.9	0%	7%
	u/s Porter	FR_FRRD	FRUPO	2.2					1140	491	923	491	11	0%	10	0%	7	0%	7	0%	700	21%	584	14%	499	9%	437	6%	<0.01	0.0	68	7.1	11.5	0%	4%	62	7.0	11.4	0%	4%	57	7.0	11.4	0%	4%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	40%	22%	16%	47%	988	641	823	641	12	0%	11	0%	9	0%	9	0%	561	12%	565	12%	469	7%	433	6%	<0.01	0.0	61	7	11	0%	4%	59	7	11	0%	4%	58	7	11	0%	4%
	u/s Chauncey Creek	FR_FRABCH	FO22	1.9					964	620	803	620	11	0%	10	0%	9	0%	9	0%	544	11%	538	11%	457	7%	388	4%	0.012	0.9	58	8	13	0%	5%	57	8	13	0%	5%	56	8	13	0%	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	4.9%	9.2%	17%	5.8%	964	620	803	620	11	0%	10	0%	9	0%	9	0%	544	11%	538	11%	457	7%	388	4%	<0.01	0.0	58	7.0	11.4	0%	4%	57	7.0	11.3	0%	4%	56	7.0	11.3	0%	4%
	Fording River u/s Dry Creek	LC_FRUS	FO28	4.9	2.3%	3.8%	7.7%	0.6%	964	620	803	620	11	0%	10	0%	9	0%	9	0%	544	11%	538	11%	457	re	388	4%	0.028	2.2	58	9.2	15.3	0%	7%	57	9.2	15.3	0%	7%	56	9.2	15.3	0%	7%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	4.2%	9.2%	7.3%	9.1%	964	620	803	620	11	0%	10	0%	9	0%	9	0%	544	11%	538	11%	457	7%	388	4%	0.029	2.3	58	9.3	15.5	0%	7%	57	9.3	15.5	0%	7%	56	9.3	15.5	0%	7%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	7.6%	4.6%	6.2%	1.3%	823	448	745	448	9	0%	7	0%	9	0%	8	0%	428	6%	340	3%	376	4%	352	3%	0.033	2.6	45	9	16	0%	7%	44	9	16	0%	7%	50	10	16	0%	7%
	Tributaries																																															
	Henretta Creek	*FR_HC3*	*HENUP*	*1.7*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*8*	*0%*	*0%*	*0.3%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Ewin Creek		*EWCK*	*15*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Other reference tributaries		*-*	*13*	*0%*	*0%*	*0%*	*0%*	*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*0%*	*2%*	*0.8*	*5.1*	*10.9*	*0%*	*2%*	*0.6*	*5.1*	*10.9*	*0%*	*2%*
	Henretta Creek	FR_HC1	HENFO	3.0	12%	3.1%	9.7%	1.3%	421	242	310	242	4	0%	4	0%	2.1	0%	3.9	0%	343	3%	367	4%	200	1%	332	3%	0.026	2.0	55	9	15	0%	7%	60	9	15	0%	7%	31	9	15	0%	7%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	0%	0.8%	0%	1.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.3	0%	6.2%	0%	1.3%	2156	1968	2168	1968	12	0%	12	0%	12	0%	12	0%	1049	48%	1450	72%	1046	48%	1450	72%	0.031	2.4	28	9	15	0%	7%	27	9	15	0%	7%	28	9	15	0%	7%
	Lake Mountain Creek	FR_NGD1	NGD1	0.0	0%	0.0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	0.1	0%	0.8%	0%	0%	1865	697	1414	697	30	2%	25	1%	28	2%	28	2%	980	43%	870	35%	824	31%	696	21%	<0.01	0.0	170	8	12	0%	5%	144	7	12	0%	5%	161	8	12	0%	5%
	Swift Creek	GH_SC1-2	SWCK	0.0	0%	0%	0%	0%	3316	3167	3204	3167	48	10%	48	10%	47	9%	45	8%	2443	93%	2411	92%	2341	92%	2288	91%	0.151	11.8	1215	20.5	37.1	69%	30%	1197	20.5	37.1	69%	30%	1154	20.5	37.1	69%	30%
	Cataract Creek	GH_CC1	CATCK	0.0	0%	0%	0%	0%	3304	3268	3259	3259	22	1%	22	1%	21	1%	22	1%	2466	93%	2470	93%	2401	92%	2455	93%	0.151	11.8	836	20.3	36.7	67%	30%	838	20.3	36.7	67%	30%	814	20.3	36.6	67%	30%
	Porter Creek	GH_PC1	POCK	0.2	0%	0%	0%	0%	806	794	770	770	0.3	0%	0.3	0%	0.3	0%	0.3	0%	541	11%	557	12%	451	7%	540	11%	<0.01	0.0	92	7	12	0%	4%	95	7	12	0%	4%	77	7	12	0%	4%
	LCO Dry Creek	LC_DCDS	LC_DCDS	1.9	0%	0%	0%	0%	781	524	691	524	9	0%	7.6	0%	8	0%	7.6	0%	445	6%	370	4%	371	4%	326	3%	0.171	13.4	51	20.3	36.8	68%	30%	43.7	20.3	36.6	67%	30%	48.9	20.3	36.7	67%	30%
	LCO Dry Creek	LC_DC1	LC_DC1	0.33	0%	0%	0%	5.8%	588	257	529	257	7	0%	5.0	0%	6	0%	4.97	0%	348	3%	238.0	1%	262.1	1%	232.9	1%	0.055	4.3	42.5	11.2	19.0	2%	10%	30.7	11.0	18.7	1%	10%	36.8	11.1	18.9	1%	10%
	Unnamed Creek		LC_UC	0.8	0%	0%	0%	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Greenhills Creek		GHCKU	1.7	0%	0%	0%	0%	1540	743	1470	743	2	0%	1	0%	1.3	0%	1.2	0%	1249	61%	970	42%	944	40%	877	35%	0.031	2.4	74	9.6	16.0	0%	8%	72	9.5	16.0	0%	8%	78	9.6	16.0	0%	8%
	Greenhills Creek	GH_GH1	GHCKD	0.24	0%	0%	0%	0.6%	1540	743	1470	743	2	0%	1	0%	1.3	0%	1.2	0%	1249	61%	970	42%	944	40%	877	35%	0.328	25.7	74	33	62	99%	55%	72	33	62	99%	55%	78	33	62	99%	55%
	MU1 Summary																																															
	Overall % effect by area (characterized areas)													0%		0%		0%		0%		7%		6%		4%		3%						2%	5%				2%	5%				2%	5%
	Overall % effect by use (characterized areas)													0.1%		0.1%		0.0%		0.0%		9.8%		11.4%		4.3%		4.9%						0.1%	4.9%				0.1%	4.8%				0.1%	5.3%
	Proportion of MU1 with effect of	<L1												99%		99%		99%		99%		59%		59%		92%		96%						97%	96%				97%	96%				97%	96%
		L1-L2												0%		0%		0%		0%		29%		37%		0%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		9%		2%		2%		2%						0%	2%				0%	2%				0%	2%
		>L3												0%		0%		0%		0%		2%		0%		0%		0%						2%	0%				2%	0%				2%	0%
		Uncharacterized areas												17%		17%		17%		17%		17%		17%		17%		17%						19%	17%				19%	17%				19%	17%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		31%		31%		91%		100%						100%	100%				100%	100%				100%	100%
MU2	**Mainstem Fording River**																																															
	d/s Josephine Falls		FO9	9.1					823	448	745	448	9	0%	7	0%	9	0%	8	0%	428	6%	340	3%	376	4%	352	3%	0.034	2.7	45	9.5	16.0	7%	8%	44	9.5	16.0	7%	8%	50	9.6	16.1	7%	8%
	d/s Grace Cr.	LC_LC6	FRUL	15					731	409	670	409	7	0%	5	0%	7	0%	6	0%	357	3%	284	2%	324	3%	301	2%	0.034	2.7	35	9	16	7%	7%	33	9	16	7%	7%	39	9	16	7%	7%
	d/s Line Cr.	LC_LC5	FO23	5.9					731	409	670	409	7	0%	5	0%	7	0%	6	0%	357	3%	284	2%	324	3%	301	2%	0.021	1.6	35	8	14	4%	6%	33	8	14	4%	6%	39	8	14	4%	6%
	Tributaries																																															
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*3.2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s LCO	*LC_LC1*	*LI24*	*2*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	South Line Cr.	*LC_SLC*	*SLINE*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*4*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	1.2					928	383	804	383	11	0%	9.5	0%	10	0%	10.5	0%	651	18%	600	15%	550	12%	494	9%	<0.01	0.0	102	7	12	2%	4%	92	7	12	2%	4%	91	7	12	2%	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76					1170	529	1057	529	5	0%	4.8	0%	5	0%	4.8	0%	544	11%	450	7%	477	8%	422	6%	0.015	1.2	37	8	13	3%	5%	34	8	13	3%	5%	36	8	13	3%	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75					1170	529	1057	529	5	0%	5	0%	5	0%	5	0%	544	11%	450	7%	477	8%	422	6%	0.018	1.4	37	8.19	13.51	4%	6%	38	8.21	13.54	4%	6%	39	8.22	13.56	4%	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	0.8					898	393	837	393	3	0%	3.4	0%	3.3	0%	3.4	0%	407	5%	341	3%	361	3%	328	3%	0.035	2.7	43	10	16	7%	8%	38	10	16	7%	8%	39	10	16	7%	8%
	d/s LIDSL	LC_LCC	LIDCOM	2.4					898	393	837	393	3	0%	3	0%	3	0%	3	0%	407	5%	341	3%	361	3%	328	3%	0.010	0.8	43	7.6	12.5	3%	5%	32	7.5	12.2	3%	5%	33	7.5	12.3	3%	5%
	d/s LIDSL	LC_LC4	LI8	3.6					776	361	741	361	2.5	0%	3.0	0%	2.8	0%	3.0	0%	335	3%	279	2%	310	2%	286	2%	<0.01	0.0	36	7	11	2%	4%	32	7	11	2%	4%	33	7	11	2%	4%
	MU2 Summary																																															
	Overall % effect (characterized areas)													0%		0%		0%		0%		3%		2%		2%		2%						4%	5%				4%	5%				4%	5%
	Proportion of MU2 with effect of	<L1												100%		100%		100%		100%		95%		98%		98%		100%						100%	100%				100%	100%				100%	100%
		L1-L2												0%		0%		0%		0%		5%		2%		2%		0%						0%	0%				0%	0%				0%	0%
		L2-L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		>L3												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
		Uncharacterized areas												0%		0%		0%		0%		0%		0%		0%		0%						0%	0%				0%	0%				0%	0%
	Proportion of Fording with effect (characterized areas)	<L1												100%		100%		100%		100%		100%		100%		100%		100%						100%	100%				100%	100%				100%	100%
MU3	**Mainstem Elk River**																																															
	u/s GHO	*GH_ER2*	*ELUGH*	*215*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	d/s Thompson Cr.	GH_ERC	EL20	18					288	177	230	177	1.8	0%	1.63	0%	1.71	0%	1.06	0%	110	0%	106	0%	91	0%	66	0%	-	0.0	5.9	6.0	11.0	2%	3%	5.0	5.9	11.0	2%	3%	5.1	5.9	11.0	2%	3%
	u/s Boivin Cr.	GH_ER1	ELUEL	14					280	174	224	174	1.7	0%	1.52	0%	1.59	0%	0.99	0%	104	0%	100	0%	85	0%	63	0%	<0.01	0.0	5.6	5.9	11.0	2%	3%	4.7	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%
	d/s Elkford Sewage Ponds		ELDEL	41					280	174	224	174	1.7	0%	1.5	0%	1.6	0%	1.0	0%	104	0%	100	0%	85	0%	63	0%	-	0.0	5.6	6	11	2%	3%	4.7	6	11	2%	3%	4.8	6	11	2%	3%
	u/s Fording R.		ELUFO	13					280	174	224	174	1.7	0%	1.5	0%	1.6	0%	1.0	0%	104	0%	100	0%	85	0%	63	0%	-	0.0	5.6	5.9	11.0	2%	3%	4.7	5.9	11.0	2%	3%	4.8	5.9	11.0	2%	3%
	Tributaries																																															
	Michelson Cr.	*GH_MC1*	*-*	*0.007*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Unnamed tributary west of Elk River		*UCWER*	*15*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Other reference tributaries		*-*	*92*					*186*	*116*	*153*	*116*	*0.066*	*0%*	*0.037*	*0%*	*0.01*	*0%*	*0.016*	*0%*	*43*	*0%*	*33*	*0%*	*35*	*0%*	*28*	*0%*	*<0.01*	0.0	*0.8*	*5.2*	*10.9*	*2%*	*2%*	*0.8*	*5.1*	*10.9*	*2%*	*2%*	*0.6*	*5.1*	*10.9*	*2%*	*2%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Leask Cr.	GH_LC1	-	0					3382	3154	3291	3154	169	87%	135	76%	107	60%	129	73%	2339	92%	2122	89%	2229	90%	2186	90%	0.128	10.0	337	18	32	55%	25%	277	18	32	54%	25%	302	18	32	55%	25%
	Wolfram Cr.	GH_WC2

Table A-10: Integrated Effects Table for Benthic Invertebrates - 2021

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	194	6.8	7%	1%	236	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	341	32	38%	14%	511	1%	1%	<0.01	0.0	103	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	341	32	38%	14%	511	1%	1%	<0.01	0.0	103	7.3	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	341	32	38%	14%	511	1%	1%	0.012	0.9	103	8.2	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	405	31	24%	10%	684	3%	3%	0.022	1.7	149	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	432	32	21%	10%	669	3%	3%	0.025	2.0	148	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	432	32	21%	10%	669	3%	3%	0.025	2.0	148	9.4	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	432	32	21%	10%	669	3%	3%	<0.01	0.0	148	7.5	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	533	29	10%	6%	531	1%	1%	<0.01	0.0	120	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	516	28	10%	6%	509	1%	1%	0.012	0.9	114	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	516	28	10%	6%	509	1%	1%	<0.01	0.0	114	7.3	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	516	28	10%	6%	509	1%	1%	0.028	2.2	114	9.5	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	516	28	10%	6%	509	1%	1%	0.029	2.3	114	9.6	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	375	20	11%	5%	370	0%	0%	0.033	2.6	80	9.7	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	221	9	8%	2%	295	0%	0%	0.026	2.0	50	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1188	106	56%	18%	634	2%	2%	0.031	2.4	217	10	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	452	78.1	72%	31%	879	9%	9%	-	0.0	233	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	504	123	85%	41%	1230	34%	34%	<0.01	0.0	400	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2329.45	27	3%	0%	1983	84%	84%	0.151	11.8	712	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2631.43	34	6%	0%	2040	85%	85%	0.151	11.8	678	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	747	1.5	0%	0%	527	1%	1%	<0.01	0.0	92	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	281	90.6	95%	46%	466	0%	0%	0.171	13.4	174	21	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	182	51.6	95%	40%	269	0%	0%	0.055	4.3	100	12	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	684	10	0%	0%	1140	26%	26%	0.031	2.4	232	10.2	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	684	10	0%	0%	1140	26%	26%	0.328	25.7	232	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						8%	4%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					88%	92%		95%	95%					96%	99%
		L1-L2					1%	3%		0%	0%					0%	0%
		L2-L3					4%	5%		3%	3%					3%	0%
		>L3					5%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					86%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	375	20	11%	5%	370	0%	0%	0.033	2.6	80	9.7	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	339	15	8%	3%	318	0%	0%	0.034	2.7	61	10	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	339	15	8%	3%	318	0%	0%	0.021	1.6	61	9	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	382	26	20%	8%	484	1%	1%	<0.01	0.0	86	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	410	18	7%	3%	581	1%	1%	0.015	1.2	65	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	304	12	6%	2%	420	0%	0%	0.018	1.4	63	8.46	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	304	12	6%	2%	420	0%	0%	0.035	2.7	63	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	284	10	5%	1%	340	0%	0%	0.010	0.8	52	7.7	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	284	9.8	5%	1%	340	0%	0%	<0.01	0.0	52	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						4%	2%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					88%	100%		100%	100%					100%	100%
		L1-L2					12%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	164	1.33	0%	0%	82	0%	0%	0.00	0.0	5.8	5.9	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	162	1.24	0%	0%	78	0%	0%	<0.01	0.0	5.5	5.9	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	162	1	0%	0%	78	0%	0%	-	0.0	5	6	<L1	<L1
	u/s Fording R.		ELUFO	13	162	1	0%	0%	78	0%	0%	-	0.0	5	5.9	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	1958	134	71%	13%	1857	79%	79%	0.128	10.0	332	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	940	18	1%	0%	1369	46%	46%	0.606	47.5	228	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	98%		98%	98%					98%	99%
		L1-L2					0%	1%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					1%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	211	6.5	4%	1%	174	0%	0%	<0.01	0.0	26	6.6	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	211	6.5	4%	1%	174	0%	0%	<0.01	0.0	26	6.6	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	203	5.2	3%	0%	176	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.713	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	229	6.7	4%	1%	210	0%	0%	0.012	0.9	23	7.5	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	229	6.7	4%	1%	210	0%	0%	0.014	1.1	23	7.7	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	229	6.6	3%	1%	205	0%	0%	<0.01	0.0	28	6.7	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	285	2.3	0%	0%	334	0%	0%	0.046	3.6	55	11	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	197	1	0%	0%	212	0%	0%	0.027	2.1	34	8.9	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	197	1.43	0%	0%	212	0%	0%	0.027	2.1	34	8.9	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	274	0.55	0%	0%	74	0%	0%	-	0.0	13.0	6.3	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	161	0.287	0%	0%	117	0%	0%	-	0.0	4.5	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	211	0.44	0%	0%	40	0%	0%	<0.01	0.0	7.6	6.1	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1095	11	0%	0%	739	4%	4%	0.061	4.8	136	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1798	80	38%	6%	1686	70%	70%	0.085	6.7	374	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1691	120	64%	14%	1754	74%	74%	0.207	16.2	597	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU4 with effect of	<L1					99%	99%		99%	99%					99%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	207	3.8	1%	0%	173	0%	0%	0.014	1.1	19	7.57	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	202	3.4	1%	0%	159	0%	0%	0.014	1.1	16	7.5	<L1	<L1
	d/s Fernie		ELDFE	50	202	3	1%	0%	159	0%	0%	0.024	1.9	16	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	198	2.7	1%	0%	122	0%	0%	0.024	1.9	13	8.2	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	184	2.1	0%	0%	98	0%	0%	0.018	1.4	10.0	7.6	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-11: Integrated Effects Table for Benthic Invertebrates - 2022

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.81	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.81	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.81	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	193	5.8	4%	1%	241	0%	0%	<0.01	0.0	39	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	352	31	35%	13%	516	1%	1%	<0.01	0.0	105	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	352	31	35%	13%	516	1%	1%	<0.01	0.0	105	7.3	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	352	31	35%	13%	516	1%	1%	0.012	0.9	105	8.2	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	422	31	21%	10%	690	3%	3%	0.022	1.7	151	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	454	31	18%	9%	678	3%	3%	0.025	2.0	150	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	454	31	18%	9%	678	3%	3%	0.025	2.0	150	9.4	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	454	31	18%	9%	678	3%	3%	<0.01	0.0	150	7.5	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	560	30	8%	6%	553	1%	1%	<0.01	0.0	127	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	543	29	9%	5%	534	1%	1%	0.012	0.9	122	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	543	29	9%	5%	534	1%	1%	<0.01	0.0	122	7.4	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	543	29	9%	5%	534	1%	1%	0.028	2.2	122	9.6	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	543	29	9%	5%	534	1%	1%	0.029	2.3	122	9.7	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	389	20	11%	5%	395	0%	0%	0.033	2.6	85	9.8	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	229	8	5%	1%	310	0%	0%	0.026	2.0	52	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1223	105	56%	17%	663	3%	3%	0.031	2.4	227	10	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	465	80.8	72%	31%	883	10%	10%	-	0.0	235	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	547	123	81%	39%	1297	40%	40%	<0.01	0.0	420	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2435.34	28	3%	0%	2081	86%	86%	0.151	11.8	748	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2802.89	36	7%	0%	2160	88%	88%	0.151	11.8	718	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	764	1.3	0%	0%	542	1%	1%	<0.01	0.0	94	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	323	96.6	93%	44%	548	1%	1%	0.171	13.4	198	21	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	195	58.3	95%	42%	333	0%	0%	0.055	4.3	120	12	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	706	9	0%	0%	1172	29%	29%	0.031	2.4	238	10.2	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	706	9	0%	0%	1172	29%	29%	0.328	25.7	238	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						7%	3%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					88%	92%		95%	95%					96%	99%
		L1-L2					4%	2%		0%	0%					0%	0%
		L2-L3					2%	5%		3%	3%					3%	0%
		>L3					5%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					93%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	389	20	11%	5%	395	0%	0%	0.033	2.6	85	9.8	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	357	16	8%	3%	338	0%	0%	0.034	2.7	64	10	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	357	16	8%	3%	338	0%	0%	0.021	1.6	64	9	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	427	27	16%	7%	502	1%	1%	<0.01	0.0	89	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	456	21	7%	4%	593	2%	2%	0.015	1.2	70	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	345	13	5%	2%	428	0%	0%	0.018	1.4	63	8.45	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	345	13	5%	2%	428	0%	0%	0.035	2.7	63	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	323	11	4%	1%	343	0%	0%	0.010	0.8	51	7.7	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	323	11.0	4%	1%	343	0%	0%	<0.01	0.0	51	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						4%	2%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					88%	100%		100%	100%					100%	100%
		L1-L2					12%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.42	0%	0%	88	0%	0%	0.00	0.0	6.6	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	165	1.33	0%	0%	84	0%	0%	<0.01	0.0	6.2	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	165	1	0%	0%	84	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	165	1	0%	0%	84	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2026	139	72%	14%	1937	82%	82%	0.128	10.0	350	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	954	18	1%	0%	1460	54%	54%	0.606	47.5	242	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	98%		98%	98%					98%	99%
		L1-L2					0%	1%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					1%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	217	6.7	4%	1%	182	0%	0%	<0.01	0.0	27	6.6	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	217	6.7	4%	1%	182	0%	0%	<0.01	0.0	27	6.6	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	209	5.4	3%	0%	182	0%	0%	<0.01	0.0	23	6.6	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	166	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.712	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	241	4.1	1%	0%	219	0%	0%	0.012	0.9	16	7.33	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	241	4.1	1%	0%	219	0%	0%	0.014	1.1	16	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	240	4.0	1%	0%	212	0%	0%	<0.01	0.0	19	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	288	2.0	0%	0%	348	0%	0%	0.046	3.6	56	11	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	199	1	0%	0%	225	0%	0%	0.027	2.1	35	8.9	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	199	1.32	0%	0%	225	0%	0%	0.027	2.1	35	8.9	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	275	0.47	0%	0%	75	0%	0%	-	0.0	13.0	6.3	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.384	0%	0%	119	0%	0%	-	0.0	4.7	5.9	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	210	0.37	0%	0%	40	0%	0%	<0.01	0.0	7.4	6.1	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1195	9	0%	0%	783	6%	6%	0.061	4.8	82	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1899	73	32%	4%	1502	57%	57%	0.085	6.7	390	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1647	96	50%	10%	1660	68%	68%	0.207	16.2	304	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		99%	99%					99%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	213	4.1	1%	0%	186	0%	0%	0.014	1.1	19	7.56	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	207	3.3	1%	0%	163	0%	0%	0.014	1.1	16	7.5	<L1	<L1
	d/s Fernie		ELDFE	50	207	3	1%	0%	163	0%	0%	0.024	1.9	16	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	202	2.7	1%	0%	125	0%	0%	0.024	1.9	13	8.2	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	187	2.0	0%	0%	100	0%	0%	0.018	1.4	10.2	7.6	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-12: Integrated Effects Table for Benthic Invertebrates - 2023

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	196	4.7	3%	0%	240	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	334	28	32%	12%	505	1%	1%	<0.01	0.0	98	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	334	28	32%	12%	505	1%	1%	<0.01	0.0	98	7.3	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	334	28	32%	12%	505	1%	1%	0.012	0.9	98	8.2	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	380	25	18%	8%	686	3%	3%	0.022	1.7	85	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	423	26	15%	7%	679	3%	3%	0.025	2.0	88	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	423	26	15%	7%	679	3%	3%	0.025	2.0	88	9.2	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	423	26	15%	7%	679	3%	3%	<0.01	0.0	88	7.2	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	571	25	5%	4%	562	1%	1%	<0.01	0.0	90	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	548	24	5%	4%	536	1%	1%	0.012	0.9	87	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	548	24	5%	4%	536	1%	1%	<0.01	0.0	87	7.2	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	548	24	5%	4%	536	1%	1%	0.028	2.2	87	9.4	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	548	24	5%	4%	536	1%	1%	0.029	2.3	87	9.5	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	390	18	8%	3%	403	0%	0%	0.033	2.6	69	9.7	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	227	6	3%	0%	315	0%	0%	0.026	2.0	52	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1234	57	20%	6%	799	6%	6%	0.031	2.4	133	10	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	1001	86.5	43%	16%	928	12%	12%	-	0.0	251	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	637	114	68%	33%	1428	51%	51%	<0.01	0.0	389	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2553.53	28	4%	0%	2172	89%	89%	0.151	11.8	778	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2894.45	38	8%	0%	2243	90%	90%	0.151	11.8	746	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	772	1.1	0%	0%	553	1%	1%	<0.01	0.0	96	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	335	75.2	87%	36%	513	1%	1%	0.171	13.4	169	21	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	196	47.8	92%	36%	339	0%	0%	0.055	4.3	108	12	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	698	8	0%	0%	1181	30%	30%	0.031	2.4	236	10.2	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	698	8	0%	0%	1181	30%	30%	0.328	25.7	236	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						6%	3%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					89%	93%		95%	95%					96%	99%
		L1-L2					3%	2%		1%	1%					0%	0%
		L2-L3					3%	4%		2%	2%					3%	0%
		>L3					4%	0%		2%	2%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					95%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	390	18	8%	3%	403	0%	0%	0.033	2.6	69	9.7	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	364	14	6%	2%	347	0%	0%	0.034	2.7	55	10	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	364	14	6%	2%	347	0%	0%	0.021	1.6	55	9	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	419	29	19%	9%	550	1%	1%	<0.01	0.0	98	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	446	20	7%	3%	639	2%	2%	0.015	1.2	74	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	337	13	6%	2%	459	0%	0%	0.018	1.4	69	8.5	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	337	13	6%	2%	459	0%	0%	0.035	2.7	69	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	312	11	5%	1%	374	0%	0%	0.010	0.8	56	7.8	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	312	11.2	5%	1%	374	0%	0%	<0.01	0.0	56	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						3%	1%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					97%	100%		100%	100%					100%	100%
		L1-L2					3%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.43	0%	0%	89	0%	0%	0.00	0.0	6.8	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	164	1.34	0%	0%	84	0%	0%	<0.01	0.0	6.4	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	164	1	0%	0%	84	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	164	1	0%	0%	84	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2085	123	65%	11%	2028	85%	85%	0.128	10.0	345	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1014	18	1%	0%	1555	61%	61%	0.606	47.5	257	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	98%		98%	98%					98%	99%
		L1-L2					0%	1%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					1%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	217	6.2	4%	1%	184	0%	0%	<0.01	0.0	24	6.6	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	217	6.2	4%	1%	184	0%	0%	<0.01	0.0	24	6.6	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	209	5.0	2%	0%	185	0%	0%	<0.01	0.0	21	6.5	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.711	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	238	3.8	1%	0%	223	0%	0%	0.012	0.9	17	7.35	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	238	3.8	1%	0%	223	0%	0%	0.014	1.1	17	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	237	3.7	1%	0%	217	0%	0%	<0.01	0.0	20	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	288	1.6	0%	0%	343	0%	0%	0.046	3.6	54	11	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	199	1	0%	0%	227	0%	0%	0.027	2.1	35	8.9	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	199	1.11	0%	0%	227	0%	0%	0.027	2.1	35	8.9	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	272	0.5	0%	0%	75	0%	0%	-	0.0	12.8	6.3	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	163	0.333	0%	0%	120	0%	0%	-	0.0	4.7	5.9	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	210	3.52	1%	0%	60	0%	0%	<0.01	0.0	12.5	6.3	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1248	12	0%	0%	835	7%	7%	0.061	4.8	87	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1966	66	26%	3%	1530	59%	59%	0.085	6.7	411	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1656	99	52%	10%	1786	75%	75%	0.207	16.2	325	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU4 with effect of	<L1					99%	99%		99%	99%					99%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	212	3.8	1%	0%	185	0%	0%	0.014	1.1	18	7.53	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	207	3.0	1%	0%	168	0%	0%	0.014	1.1	14	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	207	3	1%	0%	168	0%	0%	0.024	1.9	14	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	202	2.4	0%	0%	128	0%	0%	0.024	1.9	12	8.1	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	187	1.8	0%	0%	102	0%	0%	0.018	1.4	9.0	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-13: Integrated Effects Table for Benthic Invertebrates - 2024

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
	Mainstem Fording River																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	187	3.9	2%	0%	244	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	348	13	5%	2%	526	1%	1%	<0.01	0.0	49	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	348	13	5%	2%	526	1%	1%	<0.01	0.0	49	6.9	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	348	13	5%	2%	526	1%	1%	0.012	0.9	49	7.9	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	395	12	3%	1%	701	3%	3%	0.022	1.7	49	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	437	14	3%	1%	699	3%	3%	0.025	2.0	55	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	437	14	3%	1%	699	3%	3%	0.025	2.0	55	8.9	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	437	14	3%	1%	699	3%	3%	<0.01	0.0	55	7.0	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	589	20	3%	2%	583	1%	1%	<0.01	0.0	74	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	565	20	3%	2%	557	1%	1%	0.012	0.9	73	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	565	20	3%	2%	557	1%	1%	<0.01	0.0	73	7.1	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	565	20	3%	2%	557	1%	1%	0.028	2.2	73	9.3	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	565	20	3%	2%	557	1%	1%	0.029	2.3	73	9.4	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	407	15	5%	2%	416	0%	0%	0.033	2.6	60	9.6	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU1	*Ewin Creek*		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	222	5	2%	0%	314	0%	0%	0.026	2.0	51	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1074	14	1%	0%	816	7%	7%	0.031	2.4	28	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	1206	102.6	54%	16%	1127	25%	25%	-	0.0	307	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	666	126	71%	35%	1468	55%	55%	<0.01	0.0	417	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2645.69	26	3%	0%	2216	90%	90%	0.151	11.8	794	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2902.48	34	6%	0%	2227	90%	90%	0.151	11.8	737	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	770	0.9	0%	0%	555	1%	1%	<0.01	0.0	96	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	330	15.7	9%	3%	441	0%	0%	0.171	13.4	58	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	195	10.5	18%	4%	293	0%	0%	0.055	4.3	38	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	712	6	0%	0%	1177	29%	29%	0.031	2.4	233	10.2	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	712	6	0%	0%	1177	29%	29%	0.328	25.7	233	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						2%	1%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					97%	97%		95%	95%					96%	99%
		L1-L2					0%	1%		0%	0%					0%	0%
		L2-L3					0%	1%		3%	3%					3%	0%
		>L3					2%	0%		2%	2%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Fording River																
	d/s Josephine Falls		FO9	9.1	407	15	5%	2%	416	0%	0%	0.033	2.6	60	9.6	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	368	12	4%	1%	356	0%	0%	0.034	2.7	50	10	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	368	12	4%	1%	356	0%	0%	0.021	1.6	50	9	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	404	23	12%	6%	530	1%	1%	<0.01	0.0	91	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	445	16	4%	2%	640	2%	2%	0.015	1.2	69	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	340	11	3%	1%	460	0%	0%	0.018	1.4	66	8.48	<L1	<L1
MU2	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	340	11	3%	1%	460	0%	0%	0.035	2.7	66	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	314	9	3%	1%	375	0%	0%	0.010	0.8	55	7.8	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	314	9.0	3%	1%	375	0%	0%	<0.01	0.0	55	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						2%	1%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					97%	100%		100%	100%					100%	100%
		L1-L2					3%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.32	0%	0%	86	0%	0%	0.00	0.0	6.9	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	164	1.24	0%	0%	82	0%	0%	<0.01	0.0	6.5	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	164	1	0%	0%	82	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	164	1	0%	0%	82	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
MU3	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2137	110	59%	8%	2116	87%	87%	0.128	10.0	343	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1072	17	1%	0%	1639	67%	67%	0.606	47.5	269	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	99%		98%	98%					98%	99%
		L1-L2					0%	0%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					1%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s Grave Cr.	EV_ER4	EL19	11	221	5.4	2%	0%	187	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	221	5.4	2%	0%	187	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	4.4	2%	0%	187	0%	0%	<0.01	0.0	19	6.5	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	163	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	163	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	163	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.713	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	244	4.0	1%	0%	230	0%	0%	0.012	0.9	17	7.35	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	244	4.0	1%	0%	230	0%	0%	0.014	1.1	17	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	243	3.9	1%	0%	223	0%	0%	<0.01	0.0	21	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU4	*Alexander Cr. Near bend to West*	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	304	0.9	0%	0%	312	0%	0%	0.046	3.6	31	10	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	207	1	0%	0%	207	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	207	0.63	0%	0%	207	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	283	1.28	0%	0%	81	0%	0%	-	0.0	13.6	6.3	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.285	0%	0%	118	0%	0%	-	0.0	4.6	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	275	11.26	8%	2%	152	0%	0%	<0.01	0.0	37.9	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1314	15	1%	0%	905	11%	11%	0.061	4.8	95	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1921	63	24%	3%	1533	60%	60%	0.085	6.7	412	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1708	98	51%	9%	1902	81%	81%	0.207	16.2	338	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		1%	1%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		2%	2%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	d/s Sparwood	EV_ER1	EL1	0.18	216	3.4	1%	0%	189	0%	0%	0.014	1.1	16	7.5	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	210	2.7	0%	0%	175	0%	0%	0.014	1.1	14	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	210	3	0%	0%	175	0%	0%	0.024	1.9	14	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	206	2.2	0%	0%	131	0%	0%	0.024	1.9	11	8.1	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	190	1.7	0%	0%	104	0%	0%	0.018	1.4	8.6	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU5	*Other reference tributaries*		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-144: Integrated Effects Table for Benthic Invertebrates - 2025

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	189	3.3	1%	0%	245	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	350	12	4%	1%	548	1%	1%	<0.01	0.0	48	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	350	12	4%	1%	548	1%	1%	<0.01	0.0	48	6.9	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	350	12	4%	1%	548	1%	1%	0.012	0.9	48	7.9	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	391	11	2%	1%	716	4%	4%	0.022	1.7	48	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	438	13	2%	1%	715	4%	4%	0.025	2.0	55	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	438	13	2%	1%	715	4%	4%	0.025	2.0	55	8.9	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	438	13	2%	1%	715	4%	4%	<0.01	0.0	55	7.0	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	602	18	2%	1%	598	2%	2%	<0.01	0.0	71	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	578	18	2%	1%	572	1%	1%	0.012	0.9	70	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	578	18	2%	1%	572	1%	1%	<0.01	0.0	70	7.1	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	578	18	2%	1%	572	1%	1%	0.028	2.2	70	9.3	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	578	18	2%	1%	572	1%	1%	0.029	2.3	70	9.4	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	413	14	3%	1%	428	0%	0%	0.033	2.6	58	9.6	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	226	4	1%	0%	313	0%	0%	0.026	2.0	50	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1083	13	1%	0%	831	7%	7%	0.031	2.4	27	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	1384	109.1	58%	15%	1230	34%	34%	-	0.0	333	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	668	121	68%	34%	1501	57%	57%	<0.01	0.0	430	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2808.75	28	4%	0%	2268	91%	91%	0.151	11.8	821	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2907.81	31	5%	0%	2202	89%	89%	0.151	11.8	724	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	772	0.7	0%	0%	555	1%	1%	<0.01	0.0	96	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	362	14.4	6%	2%	454	0%	0%	0.171	13.4	55	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	194	10.0	16%	3%	315	0%	0%	0.055	4.3	39	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	702	5	0%	0%	1175	29%	29%	0.031	2.4	231	10.2	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	702	5	0%	0%	1175	29%	29%	0.328	25.7	231	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						2%	1%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					97%	97%		95%	95%					96%	99%
		L1-L2					0%	1%		0%	0%					0%	0%
		L2-L3					0%	1%		3%	3%					3%	0%
		>L3					2%	0%		2%	2%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	413	14	3%	1%	428	0%	0%	0.033	2.6	58	9.6	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	376	11	3%	1%	367	0%	0%	0.034	2.7	48	10	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	376	11	3%	1%	367	0%	0%	0.021	1.6	48	9	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	405	20	9%	4%	531	1%	1%	<0.01	0.0	90	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	449	15	3%	1%	656	2%	2%	0.015	1.2	72	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	343	10	3%	1%	470	1%	1%	0.018	1.4	68	8.49	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	343	10	3%	1%	470	1%	1%	0.035	2.7	68	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	317	8	2%	0%	386	0%	0%	0.010	0.8	57	7.8	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	317	8.4	2%	0%	386	0%	0%	<0.01	0.0	57	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						2%	1%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	165	1.15	0%	0%	85	0%	0%	0.00	0.0	6.8	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	1.08	0%	0%	81	0%	0%	<0.01	0.0	6.3	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	163	1	0%	0%	81	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	163	1	0%	0%	81	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2108	92	47%	6%	2143	88%	88%	0.128	10.0	329	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1133	15	1%	0%	1669	69%	69%	0.606	47.5	270	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	99%		98%	98%					98%	99%
		L1-L2					0%	0%		0%	0%					1%	0%
		L2-L3					1%	0%		0%	0%					0%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	220	4.8	2%	0%	191	0%	0%	<0.01	0.0	21	6.5	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	220	4.8	2%	0%	191	0%	0%	<0.01	0.0	21	6.5	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	211	3.9	1%	0%	191	0%	0%	<0.01	0.0	18	6.4	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	164	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	164	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	164	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.712	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	245	4.5	1%	0%	237	0%	0%	0.012	0.9	17	7.37	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	245	4.5	1%	0%	237	0%	0%	0.014	1.1	17	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	244	4.3	1%	0%	230	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	309	0.8	0%	0%	323	0%	0%	0.046	3.6	31	10	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	208	1	0%	0%	213	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	208	0.57	0%	0%	213	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	285	1.51	0%	0%	87	0%	0%	-	0.0	14.5	6.3	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.248	0%	0%	118	0%	0%	-	0.0	4.6	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	290	11.8	7%	2%	160	0%	0%	<0.01	0.0	40.2	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1406	20	1%	0%	948	13%	13%	0.061	4.8	105	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1978	61	23%	2%	1612	65%	65%	0.085	6.7	418	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1721	93	48%	9%	1993	84%	84%	0.207	16.2	347	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		1%	1%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		2%	2%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	215	3.2	1%	0%	197	0%	0%	0.014	1.1	16	7.48	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	208	2.6	0%	0%	179	0%	0%	0.014	1.1	14	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	208	3	0%	0%	179	0%	0%	0.024	1.9	14	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	204	2.1	0%	0%	135	0%	0%	0.024	1.9	11	8.1	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	189	1.6	0%	0%	108	0%	0%	0.018	1.4	8.8	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-15: Integrated Effects Table for Benthic Invertebrates - 2026

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
	Mainstem Fording River																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.79	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	190	2.7	1%	0%	247	0%	0%	<0.01	0.0	38	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	351	11	3%	1%	555	1%	1%	<0.01	0.0	45	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	351	11	3%	1%	555	1%	1%	<0.01	0.0	45	6.9	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	351	11	3%	1%	555	1%	1%	0.012	0.9	45	7.8	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	388	10	2%	1%	712	4%	4%	0.022	1.7	45	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	432	12	2%	1%	707	4%	4%	0.025	2.0	51	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	432	12	2%	1%	707	4%	4%	0.025	2.0	51	8.9	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	432	12	2%	1%	707	4%	4%	<0.01	0.0	51	6.9	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	604	17	2%	1%	588	1%	1%	<0.01	0.0	69	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	582	17	2%	1%	570	1%	1%	0.012	0.9	67	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	582	17	2%	1%	570	1%	1%	<0.01	0.0	67	7.1	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	582	17	2%	1%	570	1%	1%	0.028	2.2	67	9.3	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	582	17	2%	1%	570	1%	1%	0.029	2.3	67	9.3	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	405	12	3%	1%	434	0%	0%	0.033	2.6	54	9.6	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU1	*Ewin Creek*		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	224	4	1%	0%	313	0%	0%	0.026	2.0	49	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1084	11	0%	0%	857	8%	8%	0.031	2.4	19	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	1409	91.6	46%	11%	1236	35%	35%	-	0.0	324	8	<L1	<L1
	Kilmarnock Creek	FR_KC1	KICK	2.4	658	117	67%	33%	1494	57%	57%	<0.01	0.0	440	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2822.3	31	5%	0%	2216	90%	90%	0.151	11.8	814	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2907.63	28	4%	0%	2173	89%	89%	0.151	11.8	711	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	771	0.6	0%	0%	555	1%	1%	<0.01	0.0	95	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	343	13.6	6%	2%	458	0%	0%	0.171	13.4	55	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	193	9.7	16%	3%	327	0%	0%	0.055	4.3	39	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	722	4	0%	0%	1173	29%	29%	0.031	2.4	229	10.1	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	722	4	0%	0%	1173	29%	29%	0.328	25.7	229	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						2%	1%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					97%	97%		95%	95%					96%	99%
		L1-L2					0%	1%		0%	0%					0%	0%
		L2-L3					1%	1%		3%	3%					3%	0%
		>L3					1%	0%		2%	2%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Fording River																
	d/s Josephine Falls		FO9	9.1	405	12	3%	1%	434	0%	0%	0.033	2.6	54	9.6	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	370	9	2%	0%	348	0%	0%	0.034	2.7	41	9	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	370	9	2%	0%	348	0%	0%	0.021	1.6	41	8	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	354	14	6%	2%	542	1%	1%	<0.01	0.0	89	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	402	6	0%	0%	437	0%	0%	0.015	1.2	34	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	314	4	0%	0%	332	0%	0%	0.018	1.4	37	8.19	<L1	<L1
MU2	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	314	4	0%	0%	332	0%	0%	0.035	2.7	37	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	293	4	0%	0%	282	0%	0%	0.010	0.8	33	7.5	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	293	3.5	0%	0%	282	0%	0%	<0.01	0.0	33	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						1%	0%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	164	1.01	0%	0%	85	0%	0%	0.00	0.0	6.6	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	0.94	0%	0%	81	0%	0%	<0.01	0.0	6.2	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	163	1	0%	0%	81	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	163	1	0%	0%	81	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
MU3	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2109	79	37%	4%	2179	89%	89%	0.128	10.0	321	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1037	13	0%	0%	1679	70%	70%	0.606	47.5	270	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	99%		98%	98%					98%	99%
		L1-L2					0%	0%		0%	0%					1%	0%
		L2-L3					1%	0%		0%	0%					0%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s Grave Cr.	EV_ER4	EL19	11	219	4.0	1%	0%	186	0%	0%	<0.01	0.0	19	6.5	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	219	4.0	1%	0%	186	0%	0%	<0.01	0.0	19	6.5	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	210	3.3	1%	0%	186	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	165	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	165	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	165	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.712	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	242	4.1	1%	0%	240	0%	0%	0.012	0.9	18	7.38	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	242	4.1	1%	0%	240	0%	0%	0.014	1.1	18	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	241	4.0	1%	0%	234	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU4	*Alexander Cr. Near bend to West*	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	314	1.1	0%	0%	336	0%	0%	0.046	3.6	33	10	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	210	1	0%	0%	219	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	210	0.7	0%	0%	219	0%	0%	0.027	2.1	19	8.6	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	296	2.5	0%	0%	94	0%	0%	-	0.0	17.1	6.4	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.218	0%	0%	118	0%	0%	-	0.0	4.5	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	289	9.63	4%	1%	160	0%	0%	<0.01	0.0	38.7	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1474	23	2%	0%	999	16%	16%	0.061	4.8	115	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1953	58	20%	2%	1649	68%	68%	0.085	6.7	457	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1667	67	27%	4%	1449	53%	53%	0.207	16.2	269	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		1%	1%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		2%	2%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	d/s Sparwood	EV_ER1	EL1	0.18	215	2.8	0%	0%	194	0%	0%	0.014	1.1	15	7.46	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	208	2.2	0%	0%	171	0%	0%	0.014	1.1	13	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	208	2	0%	0%	171	0%	0%	0.024	1.9	13	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	205	1.8	0%	0%	133	0%	0%	0.024	1.9	10	8.1	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	189	1.4	0%	0%	106	0%	0%	0.018	1.4	8.0	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU5	*Other reference tributaries*		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-16: Integrated Effects Table for Benthic Invertebrates - 2027

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
	Mainstem Fording River																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.79	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.79	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.79	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	192	2.2	0%	0%	248	0%	0%	<0.01	0.0	37	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	350	10	3%	1%	574	1%	1%	<0.01	0.0	44	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	350	10	3%	1%	574	1%	1%	<0.01	0.0	44	6.9	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	350	10	3%	1%	574	1%	1%	0.012	0.9	44	7.8	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	383	10	2%	0%	598	2%	2%	0.022	1.7	44	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	430	11	2%	1%	601	2%	2%	0.025	2.0	49	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	430	11	2%	1%	601	2%	2%	0.025	2.0	49	8.9	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	430	11	2%	1%	601	2%	2%	<0.01	0.0	49	6.9	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	606	16	1%	1%	534	1%	1%	<0.01	0.0	66	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	588	15	1%	1%	520	1%	1%	0.012	0.9	64	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	588	15	1%	1%	520	1%	1%	<0.01	0.0	64	7.0	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	588	15	1%	1%	520	1%	1%	0.028	2.2	64	9.2	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	588	15	1%	1%	520	1%	1%	0.029	2.3	64	9.3	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	410	11	2%	1%	415	0%	0%	0.033	2.6	52	9.5	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU1	*Ewin Creek*		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	222	3	0%	0%	313	0%	0%	0.026	2.0	49	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	955	11	0%	0%	865	9%	9%	0.031	2.4	19	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	670	37	8%	6%	981	15%	15%	<0.01	0.0	147	7	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2911.8	33	5%	0%	2228	90%	90%	0.151	11.8	844	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2935.38	25	3%	0%	2159	88%	88%	0.151	11.8	703	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	770	0.5	0%	0%	554	1%	1%	<0.01	0.0	95	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	363	12.2	4%	1%	419	0%	0%	0.171	13.4	49	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	193	9.0	13%	3%	305	0%	0%	0.055	4.3	37	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	711	4	0%	0%	1172	29%	29%	0.031	2.4	227	10.1	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	711	4	0%	0%	1172	29%	29%	0.328	25.7	227	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						1%	0%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					98%	99%		95%	95%					95%	99%
		L1-L2					0%	0%		1%	1%					0%	0%
		L2-L3					0%	0%		2%	2%					3%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Fording River																
	d/s Josephine Falls		FO9	9.1	410	11	2%	1%	415	0%	0%	0.033	2.6	52	9.5	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	381	8	1%	0%	347	0%	0%	0.034	2.7	39	9	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	381	8	1%	0%	347	0%	0%	0.021	1.6	39	8	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	379	14	5%	2%	584	1%	1%	<0.01	0.0	96	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	423	7	1%	0%	496	1%	1%	0.015	1.2	39	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	329	4	0%	0%	369	0%	0%	0.018	1.4	38	8.2	<L1	<L1
MU2	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	329	4	0%	0%	369	0%	0%	0.035	2.7	38	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	306	3	0%	0%	306	0%	0%	0.010	0.8	32	7.5	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	306	3.4	0%	0%	306	0%	0%	<0.01	0.0	32	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						1%	0%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	165	0.88	0%	0%	86	0%	0%	0.00	0.0	6.6	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	0.82	0%	0%	82	0%	0%	<0.01	0.0	6.2	6.0	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	163	1	0%	0%	82	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	163	1	0%	0%	82	0%	0%	-	0.0	6	6.0	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
MU3	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2127	65	26%	2%	2174	89%	89%	0.128	10.0	307	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1076	10	0%	0%	1671	69%	69%	0.606	47.5	265	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	99%		98%	98%					98%	99%
		L1-L2					0%	0%		0%	0%					1%	0%
		L2-L3					1%	0%		0%	0%					0%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	u/s Grave Cr.	EV_ER4	EL19	11	221	3.8	1%	0%	185	0%	0%	<0.01	0.0	18	6.4	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	221	3.8	1%	0%	185	0%	0%	<0.01	0.0	18	6.4	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	3.1	1%	0%	189	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	165	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	165	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	165	0.7	0%	0%	91	0%	0%	<0.01	0.0	3.3	5.712	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	245	4.5	1%	0%	254	0%	0%	0.012	0.9	18	7.39	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	245	4.5	1%	0%	254	0%	0%	0.014	1.1	18	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	245	4.4	1%	0%	247	0%	0%	<0.01	0.0	23	6.6	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU4	*Alexander Cr. Near bend to West*	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	324	1.8	0%	0%	351	0%	0%	0.046	3.6	39	10	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	214	1	0%	0%	231	0%	0%	0.027	2.1	21	8.6	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	214	1.09	0%	0%	231	0%	0%	0.027	2.1	21	8.6	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	314	3.31	0%	0%	110	0%	0%	-	0.0	21.0	6.5	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.194	0%	0%	118	0%	0%	-	0.0	4.5	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	284	7.99	3%	1%	161	0%	0%	<0.01	0.0	37.9	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1564	26	3%	0%	1052	20%	20%	0.061	4.8	124	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1932	47	13%	1%	1644	67%	67%	0.085	6.7	464	15	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1666	55	18%	3%	1415	50%	50%	0.207	16.2	263	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		1%	1%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		2%	2%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
	Mainstem Elk River																
	d/s Sparwood	EV_ER1	EL1	0.18	216	2.6	0%	0%	197	0%	0%	0.014	1.1	15	7.46	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	210	2.0	0%	0%	173	0%	0%	0.014	1.1	12	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	210	2	0%	0%	173	0%	0%	0.024	1.9	12	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	207	1.6	0%	0%	132	0%	0%	0.024	1.9	10	8.1	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	191	1.2	0%	0%	105	0%	0%	0.018	1.4	7.8	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
MU5	*Other reference tributaries*		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-17: Integrated Effects Table for Benthic Invertebrates - 2028

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						$[NO_3]$ (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	$[SO_4]$ (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.8	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.76	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.8	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.76	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.76	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	193	1.8	0%	0%	240	0%	0%	<0.01	0.0	36	6.8	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	366	10	2%	1%	594	2%	2%	<0.01	0.0	45	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	366	10	2%	1%	594	2%	2%	<0.01	0.0	45	6.9	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	366	10	2%	1%	594	2%	2%	0.012	0.9	45	7.8	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	404	10	2%	0%	622	2%	2%	0.022	1.7	45	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	449	11	1%	0%	621	2%	2%	0.025	2.0	47	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	449	11	1%	0%	621	2%	2%	0.025	2.0	47	8.9	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	449	11	1%	0%	621	2%	2%	<0.01	0.0	47	6.9	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	606	13	1%	0%	526	1%	1%	<0.01	0.0	54	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	581	12	1%	0%	511	1%	1%	0.012	0.9	52	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	581	12	1%	0%	511	1%	1%	<0.01	0.0	52	7.0	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	581	12	1%	0%	511	1%	1%	0.028	2.2	52	9.1	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	581	12	1%	0%	511	1%	1%	0.029	2.3	52	9.2	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	414	10	1%	0%	405	0%	0%	0.033	2.6	44	9.5	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	224	2	0%	0%	314	0%	0%	0.026	2.0	49	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1009	11	0%	0%	891	10%	10%	0.031	2.4	21	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	683	33	6%	5%	974	14%	14%	<0.01	0.0	148	7	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	2943.78	33	5%	0%	2259	90%	90%	0.151	11.8	864	20	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	2959.79	24	2%	0%	2199	89%	89%	0.151	11.8	715	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	769	0.4	0%	0%	554	1%	1%	<0.01	0.0	95	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	389	10.3	2%	1%	412	0%	0%	0.171	13.4	43	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	217	7.4	6%	1%	308	0%	0%	0.055	4.3	31	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	717	2	0%	0%	1166	29%	29%	0.031	2.4	78	9.6	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	717	2	0%	0%	1166	29%	29%	0.328	25.7	78	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						0%	0%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					99%	99%		95%	95%					95%	99%
		L1-L2					0%	0%		1%	1%					0%	0%
		L2-L3					0%	0%		2%	2%					3%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	414	10	1%	0%	405	0%	0%	0.033	2.6	44	9.5	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	384	7	1%	0%	343	0%	0%	0.034	2.7	36	9	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	384	7	1%	0%	343	0%	0%	0.021	1.6	36	8	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	380	13	4%	1%	609	2%	2%	<0.01	0.0	100	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	436	5	0%	0%	521	1%	1%	0.015	1.2	38	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	333	3	0%	0%	384	0%	0%	0.018	1.4	40	8.23	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	333	3	0%	0%	384	0%	0%	0.035	2.7	40	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	309	3	0%	0%	316	0%	0%	0.010	0.8	33	7.5	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	309	3.0	0%	0%	316	0%	0%	<0.01	0.0	33	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	160	0.69	0%	0%	77	0%	0%	0.00	0.0	5.8	5.9	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	159	0.65	0%	0%	73	0%	0%	<0.01	0.0	5.5	5.9	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	159	1	0%	0%	73	0%	0%	-	0.0	5	6	<L1	<L1
	u/s Fording R.		ELUFO	13	159	1	0%	0%	73	0%	0%	-	0.0	5	5.9	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2045	56	19%	2%	2188	89%	89%	0.128	10.0	299	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1046	9	0%	0%	1668	69%	69%	0.606	47.5	262	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	99%		98%	98%					98%	99%
		L1-L2					1%	0%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	221	3.3	1%	0%	182	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	221	3.3	1%	0%	182	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	2.7	0%	0%	185	0%	0%	<0.01	0.0	14	6.3	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.714	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	254	2.8	0%	0%	331	0%	0%	0.012	0.9	17	7.37	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	254	2.8	0%	0%	331	0%	0%	0.014	1.1	17	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	253	2.8	0%	0%	322	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	336	2.0	0%	0%	364	0%	0%	0.046	3.6	41	10	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	219	1	0%	0%	244	0%	0%	0.027	2.1	24	8.7	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	219	1.28	0%	0%	244	0%	0%	0.027	2.1	24	8.7	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	321	3.65	0%	0%	124	0%	0%	-	0.0	23.8	6.6	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.174	0%	0%	118	0%	0%	-	0.0	4.5	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	284	6.62	2%	0%	162	0%	0%	<0.01	0.0	37.2	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1622	18	1%	0%	1056	20%	20%	0.061	4.8	91	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1809	28	4%	0%	1386	48%	48%	0.085	6.7	222	14	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1700	29	4%	0%	1254	36%	36%	0.207	16.2	140	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		1%	1%					-	-
	Proportion of MU4 with effect of	<L1					100%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		2%	2%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	219	2.3	0%	0%	211	0%	0%	0.014	1.1	14	7.42	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	212	1.8	0%	0%	182	0%	0%	0.014	1.1	11	7.3	<L1	<L1
	d/s Fernie		ELDFE	50	212	2	0%	0%	182	0%	0%	0.024	1.9	11	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	208	1.5	0%	0%	138	0%	0%	0.024	1.9	9	8.0	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	191	1.1	0%	0%	110	0%	0%	0.018	1.4	7.2	7.4	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-18: Integrated Effects Table for Benthic Invertebrates – 2029-2053

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate			Sulphate			Selenium					
						[NO_3] (mg/L N)	Sensitive Species (*C. dubia*)	Community Endpoint (invert. SSD)	[SO_4] (mg/L)	Sensitive Species (*N. triangulifer*)	Community Endpoint (approx. SSD)	Max. 2021 OrganoSe (µg/L)	Modelled BI Se Increment (mg/kg dw)	Total [Se] (µg/L)	Modelled BI Se (mg/kg dw)	Sensitive Species (*N. triangulifer*)	Community (*H. azteca*)
MU1	**Mainstem Fording River**																
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.9	<L1	<L1
	u/s Clode Cr.		FOUCL	0.23	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.89	<L1	<L1
	u/s North Greenhills Diversion		FOUNGD	1.5	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.9	<L1	<L1
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.89	<L1	<L1
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.89	<L1	<L1
	u/s Shandley Cr.		FOUSH	1.5	206	3.3	1%	0%	292	0%	0%	<0.01	0.0	46	6.9	<L1	<L1
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	418	11	2%	1%	681	3%	3%	<0.01	0.0	72	7	<L1	<L1
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	418	11	2%	1%	681	3%	3%	<0.01	0.0	72	7.1	<L1	<L1
	d/s future AWTF-S		SCOUTDS	0.08	418	11	2%	1%	681	3%	3%	0.012	0.9	72	8.0	<L1	<L1
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	452	10	1%	0%	708	4%	4%	0.022	1.7	69	9	<L1	<L1
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	491	11	1%	0%	700	3%	3%	0.025	2.0	68	9	<L1	<L1
	1 km SW of Fording R Compliance		FRCP1SW	1.4	491	11	1%	0%	700	3%	3%	0.025	2.0	68	9.0	<L1	<L1
	u/s Porter	FR_FRRD	FRUPO	2.2	491	11	1%	0%	700	3%	3%	<0.01	0.0	68	7.1	<L1	<L1
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	641	12	0%	0%	565	1%	1%	<0.01	0.0	61	7	<L1	<L1
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	620	11	0%	0%	544	1%	1%	0.012	0.9	58	8	<L1	<L1
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	620	11	0%	0%	544	1%	1%	<0.01	0.0	58	7.0	<L1	<L1
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	620	11	0%	0%	544	1%	1%	0.028	2.2	58	9.2	<L1	<L1
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	620	11	0%	0%	544	1%	1%	0.029	2.3	58	9.3	<L1	<L1
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	448	9	1%	0%	428	0%	0%	0.033	2.6	50	9.5	<L1	<L1
	Tributaries																
	Henretta Creek	*FR_HC3*	*HENUP*	*10*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Ewin Creek		*EWCK*	*45*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*40*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Henretta Creek	FR_HC1	HENFO	5.4	242	4	1%	0%	367	0%	0%	0.026	2.0	60	9	<L1	<L1
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1968	12	0%	0%	1450	53%	53%	0.031	2.4	28	9	<L1	<L1
	Lake Mountain Creek	FR_LMP1	NGD1	1.5	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	697	30	4%	4%	980	15%	15%	<0.01	0.0	170	8	<L1	<L1
	Swift Creek	GH_SC1	SWCK	0.8	3166.59	48	14%	0%	2443	93%	93%	0.151	11.8	1215	21	L2-L3	<L1
	Cataract Creek	GH_CC1	CATCK	0.33	3258.9	22	2%	0%	2470	94%	94%	0.151	11.8	838	20	L2-L3	<L1
	Porter Creek	GH_PC1	POCK	0.26	770	0.3	0%	0%	557	1%	1%	<0.01	0.0	95	7	<L1	<L1
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	524	9.5	1%	0%	445	0%	0%	0.171	13.4	51	20	L2-L3	<L1
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	257	7.0	3%	0%	348	0%	0%	0.055	4.3	42	11	<L1	<L1
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Greenhills Creek		GHCKU	4.1	743	2	0%	0%	1249	36%	36%	0.031	2.4	78	9.6	<L1	<L1
	Greenhills Creek	GH_GH1	GHCKD	0.24	743	2	0%	0%	1249	36%	36%	0.328	25.7	78	33	>L3	<L1
	MU1 Summary																
	Overall % effect (characterized areas)						0%	0%		2%	2%					-	-
	Proportion of MU1 with effect of	<L1					98%	99%		94%	94%					95%	99%
		L1-L2					0%	0%		1%	1%					0%	0%
		L2-L3					0%	0%		2%	2%					3%	0%
		>L3					0%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU2	**Mainstem Fording River**																
	d/s Josephine Falls		FO9	9.1	448	9	1%	0%	428	0%	0%	0.033	2.6	50	9.5	<L1	<L1
	d/s Grace Cr.	LC_LC6	FRUL	15	409	7	1%	0%	357	0%	0%	0.034	2.7	39	9	<L1	<L1
	d/s Line Cr.	LC_LC5	FO23	5.9	409	7	1%	0%	357	0%	0%	0.021	1.6	39	8	<L1	<L1
	Tributaries																
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Other reference tributaries		*-*	*14*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	383	11	2%	1%	651	2%	2%	<0.01	0.0	102	7	<L1	<L1
	d/s West Line Cr.	LC_LC3	LILC3	0.76	529	5	0%	0%	544	1%	1%	0.015	1.2	37	8	<L1	<L1
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	393	3	0%	0%	407	0%	0%	0.018	1.4	43	8.27	<L1	<L1
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	393	3	0%	0%	407	0%	0%	0.035	2.7	43	10	<L1	<L1
	d/s LIDSL	LC_LCC	LIDCOM	8.9	361	3	0%	0%	335	0%	0%	0.010	0.8	36	7.6	<L1	<L1
	d/s LIDSL	LC_LC4	LI8	4.3	361	3.0	0%	0%	335	0%	0%	<0.01	0.0	36	7	<L1	<L1
	MU2 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU2 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Fording with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU3	**Mainstem Elk River**																
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	d/s Thompson Cr.	GH_ERC	EL20	18	177	1.8	0%	0%	110	0%	0%	0.00	0.0	5.9	6.0	<L1	<L1
	u/s Boivin Cr.	GH_ER1	ELUEL	14	174	1.68	0%	0%	104	0%	0%	<0.01	0.0	5.6	5.9	<L1	<L1
	d/s Elkford Sewage Ponds		ELDEL	41	174	2	0%	0%	104	0%	0%	-	0.0	6	6	<L1	<L1
	u/s Fording R.		ELUFO	13	174	2	0%	0%	104	0%	0%	-	0.0	6	5.9	<L1	<L1
	Tributaries																
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*168*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	4.1	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	0.42	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	0.47	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	1.4	-	-	-	-	-	-	-	-	0.0	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	3154	169	82%	10%	2339	92%	92%	0.128	10.0	337	18	L1-L2	<L1
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-	-	-	0.056	4.4	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	2082	19	1%	0%	2002	84%	84%	0.606	47.5	260	55	>L3	>L2
	MU3 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					-	-
	Proportion of MU3 with effect of	<L1					98%	98%		98%	98%					98%	99%
		L1-L2					0%	1%		0%	0%					1%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					1%	0%		1%	1%					0%	0%
		Uncharacterized areas					1%	1%		1%	1%					1%	1%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU4	**Mainstem Elk River**																
	u/s Grave Cr.	EV_ER4	EL19	11	231	3.0	0%	0%	188	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	d/s Grave Cr.		ELDGR	8.1	231	3.0	0%	0%	188	0%	0%	<0.01	0.0	16	6.4	<L1	<L1
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	221	2.5	0%	0%	194	0%	0%	<0.01	0.0	15	6.4	<L1	<L1
	Mainstem Michel Creek																
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	u/s Corbin Cr.		MIUCO	3.2	116	0.066	0%	0%	43	0%	0%	<0.01	0.0	0.8	5.2	<L1	<L1
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	4.1	0%	0%	472	1%	1%	0.00	0.0	14	6.3	<L1	<L1
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Leach Cr.		MIULE	7.2	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Wheeler Cr.		MI5	4.9	348	4.1	0%	0%	472	1%	1%	<0.01	0.0	14	6.3	<L1	<L1
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.7	<L1	<L1
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.71	<L1	<L1
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	0%	92	0%	0%	<0.01	0.0	3.3	5.713	<L1	<L1
	d/s Bodie Cr.		MIDBO	0.19	278	3.3	0%	0%	396	0%	0%	0.012	0.9	17	7.36	<L1	<L1
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	278	3.3	0%	0%	396	0%	0%	0.014	1.1	17	7.5	<L1	<L1
	d/s EVO	EV_MC1	MI2	0.71	277	3.2	0%	0%	388	0%	0%	<0.01	0.0	22	6.5	<L1	<L1
	Tributaries																
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Leach Creek		*LE1*	*67*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*160*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.147	0%	0%	17	0%	0%	0.021	1.6	0.8	6.8	<L1	<L1
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	446	2.8	0%	0%	426	0%	0%	0.046	3.6	55	11	<L1	<L1
	d/s Harmer Cr.		GRCK	2.3	271	2	0%	0%	285	0%	0%	0.027	2.1	32	8.8	<L1	<L1
	mouth at Elk R.	EV_GV1	GRDS	0.52	271	1.69	0%	0%	285	0%	0%	0.027	2.1	32	8.8	<L1	<L1
	Otto Cr.	EV_OC1	OCNM	0.54	347	3.23	0%	0%	142	0%	0%	-	0.0	27.6	6.6	<L1	<L1
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.156	0%	0%	118	0%	0%	-	0.0	4.5	5.8	<L1	<L1
	Balmer Creek	EV_BLM2	BACK	0.53	286	5.38	1%	0%	163	0%	0%	<0.01	0.0	36.4	6.8	<L1	<L1
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-	-	-	<0.01	0.0	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	2219	20	2%	0%	1606	65%	65%	0.061	4.8	147	12	<L1	<L1
	Gate Creek	EV_GT1	GATE	1.2	1944	34	6%	0%	1572	63%	63%	0.085	6.7	214	14	L1-L2	<L1
	Bodie Cr.	EV_BC1	BOCK	0.86	1998	44	11%	1%	1556	61%	61%	0.207	16.2	148	24	L2-L3	<L1
	MU4 Summary																
	Overall % effect (characterized areas)						0%	0%		2%	2%					-	-
	Proportion of MU4 with effect of	<L1					99%	100%		97%	97%					99%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		2%	2%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%
MU5	**Mainstem Elk River**																
	d/s Sparwood	EV_ER1	EL1	0.18	229	2.0	0%	0%	233	0%	0%	0.014	1.1	14	7.44	<L1	<L1
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	221	1.6	0%	0%	202	0%	0%	0.014	1.1	12	7.4	<L1	<L1
	d/s Fernie		ELDFE	50	221	2	0%	0%	202	0%	0%	0.024	1.9	12	8	<L1	<L1
	u/s Elko	RG_ELKORES	ELELKO	29	217	1.3	0%	0%	153	0%	0%	0.024	1.9	9	8.0	<L1	<L1
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	198	1.0	0%	0%	121	0%	0%	0.018	1.4	7.3	7.5	<L1	<L1
	Tributaries																
	McCool Creek		*MCCR*	*9.2*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5.2*	*<L1*	*<L1*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	Other reference tributaries		*-*	*264*	*116*	*0.066*	*0%*	*0%*	*43*	*0%*	*0%*	*<0.01*	*0.0*	*0.8*	*5*	*<L1*	*<L1*
	MU5 Summary																
	Overall % effect (characterized areas)						0%	0%		0%	0%					0%	0%
	Proportion of MU5 with effect of	<L1					100%	100%		100%	100%					100%	100%
		L1-L2					0%	0%		0%	0%					0%	0%
		L2-L3					0%	0%		0%	0%					0%	0%
		>L3					0%	0%		0%	0%					0%	0%
		Uncharacterized areas					0%	0%		0%	0%					0%	0%
	Proportion of Elk with effect of (characterized areas)	<L2					100%	100%		100%	100%					100%	100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-19: Integrated Effects Table for Amphibians – 2021

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	194	5.9	3%	207	1%
	u/s Clode Cr.		FOUCL	0.23	194	5.9	3%	207	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	194	5.9	3%	207	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	194	5.9	3%	207	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	194	5.9	3%	207	1%
	u/s Shandley Cr.		FOUSH	1.5	194	5.9	3%	207	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	341	26	8%	436	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	341	26	8%	436	4%
	d/s future AWTF-S		SCOUTDS	0.078	341	26	8%	436	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	405	26	7%	576	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	432	26	6%	566	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	432	26	6%	566	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	432	26	6%	566	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	533	29	6%	531	5%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	516	28	6%	509	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	516	28	6%	509	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	516	28	6%	509	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	516	28	6%	509	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	375	17	5%	313	2%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	221	8.7	4%	295	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1188	100	9%	599	6%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	452	56.3	12%	639	7%
	Kilmarnock Creek	FR_KC1	KICK	2.4	504	107	20%	1072	14%
	Swift Creek	GH_SC1-2	SWCK	0.8	2329	25	1%	1863	27%
	Cataract Creek	GH_CC1	CATCK	0.33	2631	33	1%	2014	30%
	Porter Creek	GH_PC1	POCK	0.26	747	1.5	0%	527	5%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	281	65.94	21%	373.0	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	182	35.13	18%	201.2	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	684	7.2	1%	870	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	684	7.2	1%	870	11%
	MU1 Summary								
	Overall % effect (characterized areas)						2%		2%
	Proportion of MU1 with effect of	<L1					94%		95%
		L1-L2					2%		3%
		L2-L3					3%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	375	17	5%	313	2%
	d/s Grace Cr.	LC_LC6	FRUL	15	339	13	4%	264	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	339	13	4%	264	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	382	22	6%	422	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	410	15	4%	496	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	410	15	4%	496	5%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	304	11	4%	341	3%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	304	11	4%	341	3%
	d/s LIDSL	LC_LC4	LI8	4.3	284	9.1	3%	275	2%
	MU2 Summary								
	Overall % effect (characterized areas)						2%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	164	1.16	1%	75	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	162	1.08	1%	72	0%
	d/s Elkford Sewage Ponds		ELDEL	41	162	1.08	1%	72	0%
	u/s Fording R.		ELUFO	13	162	1.08	1%	72	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	1958	116	6%	1603	23%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	940	15	2%	1193	16%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	211	4.7	2%	134	1%
	d/s Grave Cr.		ELDGR	8.1	211	4.7	2%	134	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	203	3.6	2%	134	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	166	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	166	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	166	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	229	6.7	3%	210	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	229	6.7	3%	210	1%
	d/s EVO	EV_MC1	MI2	0.71	229	6.6	3%	205	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	285	2.1	1%	314	2%
	d/s Harmer Cr.		GRCK	2.3	197	1.2	1%	177	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	197	1.2	1%	177	1%
	Otto Cr.	EV_OC1	OCNM	0.54	274	0.55	0%	72	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	161	0.192	0%	75	0%
	Balmer Creek	EV_BLM2	BACK	0.53	211	0.44	0%	40	0%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1095	11	1%	730	8%
	Gate Creek	EV_GT1	GATE	1.2	1798	80	5%	1599	23%
	Bodie Cr.	EV_BC1	BOCK	0.86	2008	101	5%	1610	23%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		99%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	207	3.5	2%	145	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	202	3.0	2%	114	1%
	d/s Fernie		ELDFE	50	202	3.0	2%	114	1%
	u/s Elko	RG_ELKORES	ELELKO	29	198	2.5	1%	98	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	184	1.87	1%	79	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-20: Integrated Effects Table for Amphibians – 2022

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	193	4.7	3%	202	1%
	u/s Clode Cr.		FOUCL	0.23	193	4.7	3%	202	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	193	4.7	3%	202	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	193	4.7	3%	202	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	193	4.7	3%	202	1%
	u/s Shandley Cr.		FOUSH	1.5	193	4.7	3%	202	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	352	26	8%	445	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	352	26	8%	445	4%
	d/s future AWTF-S		SCOUTDS	0.078	352	26	8%	445	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	422	26	6%	587	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	454	26	6%	579	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	454	26	6%	579	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	454	26	6%	579	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	560	29	6%	551	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	543	28	6%	533	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	543	28	6%	533	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	543	28	6%	533	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	543	28	6%	533	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	389	17	5%	329	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	229	7.7	4%	310	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1223	98	8%	625	7%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	465	57.2	12%	636	7%
	Kilmarnock Creek	FR_KC1	KICK	2.4	547	106	18%	1121	15%
	Swift Creek	GH_SC1-2	SWCK	0.8	2435	26	1%	1947	29%
	Cataract Creek	GH_CC1	CATCK	0.33	2803	36	1%	2160	32%
	Porter Creek	GH_PC1	POCK	0.26	764	1.3	0%	542	5%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	323	72.42	20%	417.2	4%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	195	35.41	17%	226.4	2%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	706	6.3	1%	881	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	706	6.3	1%	881	11%
	MU1 Summary								
	Overall % effect (characterized areas)						2%		2%
	Proportion of MU1 with effect of	<L1					94%		95%
		L1-L2					2%		3%
		L2-L3					3%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	389	17	5%	329	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	357	13	4%	277	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	357	13	4%	277	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	427	23	6%	432	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	456	19	5%	511	5%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	456	19	5%	511	5%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	345	12	4%	348	3%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	345	12	4%	348	3%
	d/s LIDSL	LC_LC4	LI8	4.3	323	9.7	3%	282	2%
	MU2 Summary								
	Overall % effect (characterized areas)						2%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.27	1%	75	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	165	1.18	1%	72	0%
	d/s Elkford Sewage Ponds		ELDEL	41	165	1.18	1%	72	0%
	u/s Fording R.		ELUFO	13	165	1.18	1%	72	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2026	108	6%	1655	24%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	954	15	2%	1252	17%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	217	4.8	2%	138	1%
	d/s Grave Cr.		ELDGR	8.1	217	4.8	2%	138	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	209	3.7	2%	135	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	166	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	166	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	166	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	241	4.1	2%	193	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	241	4.1	2%	193	1%
	d/s EVO	EV_MC1	MI2	0.71	240	4.0	2%	189	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	288	1.87	1%	321	3%
	d/s Harmer Cr.		GRCK	2.3	199	1.1	1%	179	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	199	1.07	1%	179	1%
	Otto Cr.	EV_OC1	OCNM	0.54	275	0.47	0%	72	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.239	0%	76	0%
	Balmer Creek	EV_BLM2	BACK	0.53	210	0.37	0%	40	0%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1195	9	1%	783	9%
	Gate Creek	EV_GT1	GATE	1.2	1899	73	4%	1486	21%
	Bodie Cr.	EV_BC1	BOCK	0.86	1926	80	4%	1354	19%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		99%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	213	3.5	2%	146	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	207	3.2	2%	116	1%
	d/s Fernie		ELDFE	50	207	3.2	2%	116	1%
	u/s Elko	RG_ELKORES	ELELKO	29	202	2.6	1%	101	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	187	1.99	1%	81	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-21: Integrated Effects Table for Amphibians – 2023

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	196	4.0	2%	208	1%
	u/s Clode Cr.		FOUCL	0.23	196	4.0	2%	208	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	196	4.0	2%	208	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	196	4.0	2%	208	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	196	4.0	2%	208	1%
	u/s Shandley Cr.		FOUSH	1.5	196	4.0	2%	208	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	334	25	8%	422	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	334	25	8%	422	4%
	d/s future AWTF-S		SCOUTDS	0.078	334	25	8%	422	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	380	22	6%	581	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	423	23	6%	575	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	423	23	6%	575	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	423	23	6%	575	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	571	25	5%	562	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	548	24	5%	536	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	548	24	5%	536	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	548	24	5%	536	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	548	24	5%	536	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	390	15	4%	332	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	227	6.4	3%	315	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1234	57	5%	769	9%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	1001	73.4	8%	788	9%
	Kilmarnock Creek	FR_KC1	KICK	2.4	637	92	14%	1256	17%
	Swift Creek	GH_SC1-2	SWCK	0.8	2554	26	1%	2051	30%
	Cataract Creek	GH_CC1	CATCK	0.33	2894	38	1%	2243	33%
	Porter Creek	GH_PC1	POCK	0.26	772	1.1	0%	553	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	335	16.6	5%	353.1	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	196	8.26	5%	177.2	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	698	5.3	1%	889	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	698	5.3	1%	889	11%
	MU1 Summary								
	Overall % effect (characterized areas)						2%		2%
	Proportion of MU1 with effect of	<L1					98%		95%
		L1-L2					1%		3%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	390	15	4%	332	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	364	11	3%	282	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	364	11	3%	282	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	419	26	6%	489	5%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	446	18	4%	560	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	446	18	4%	560	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	337	11	4%	387	3%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	337	11	4%	387	3%
	d/s LIDSL	LC_LC4	LI8	4.3	312	8.9	3%	318	2%
	MU2 Summary								
	Overall % effect (characterized areas)						2%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.27	1%	77	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	164	1.18	1%	73	0%
	d/s Elkford Sewage Ponds		ELDEL	41	164	1.18	1%	73	0%
	u/s Fording R.		ELUFO	13	164	1.18	1%	73	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2085	97	5%	1735	25%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1014	15	2%	1347	19%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	217	4.5	2%	147	1%
	d/s Grave Cr.		ELDGR	8.1	217	4.5	2%	147	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	209	3.3	2%	140	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	238	3.8	2%	199	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	238	3.8	2%	199	1%
	d/s EVO	EV_MC1	MI2	0.71	237	3.7	2%	194	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	288	1.55	1%	318	2%
	d/s Harmer Cr.		GRCK	2.3	199	0.9	0%	178	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	199	0.89	0%	178	1%
	Otto Cr.	EV_OC1	OCNM	0.54	272	0.39	0%	72	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	163	0.212	0%	77	0%
	Balmer Creek	EV_BLM2	BACK	0.53	210	0.3	0%	39	0%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1248	12	1%	806	10%
	Gate Creek	EV_GT1	GATE	1.2	1968	66	4%	1530	22%
	Bodie Cr.	EV_BC1	BOCK	0.86	2052	85	4%	1487	21%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		99%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	212	3.1	2%	148	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	207	2.8	2%	114	1%
	d/s Fernie		ELDFE	50	207	2.8	2%	114	1%
	u/s Elko	RG_ELKORES	ELELKO	29	202	2.4	1%	101	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	187	1.77	1%	81	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-22: Integrated Effects Table for Amphibians – 2024

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	187	3.4	2%	216	1%
	u/s Clode Cr.		FOUCL	0.23	187	3.4	2%	216	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	187	3.4	2%	216	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	187	3.4	2%	216	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	187	3.4	2%	216	1%
	u/s Shandley Cr.		FOUSH	1.5	187	3.4	2%	216	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	348	11	3%	441	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	348	11	3%	441	4%
	d/s future AWTF-S		SCOUTDS	0.078	348	11	3%	441	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	395	10	3%	598	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	437	12	3%	595	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	437	12	3%	595	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	437	12	3%	595	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	589	20	4%	583	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	565	19	4%	555	6%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	565	19	4%	555	6%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	565	19	4%	555	6%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	565	19	4%	555	6%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	407	12	3%	344	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	222	5.2	3%	314	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1074	14	1%	724	8%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	1206	88.9	8%	969	12%
	Kilmarnock Creek	FR_KC1	KICK	2.4	666	102	15%	1309	18%
	Swift Creek	GH_SC1-2	SWCK	0.8	2646	25	1%	2120	31%
	Cataract Creek	GH_CC1	CATCK	0.33	2902	34	1%	2227	33%
	Porter Creek	GH_PC1	POCK	0.26	770	0.9	0%	555	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	330	14.18	5%	379.6	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	195	7.67	4%	205.7	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	712	4.5	1%	883	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	712	4.5	1%	883	11%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					98%		95%
		L1-L2					1%		4%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	407	12	3%	344	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	368	10	3%	296	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	368	10	3%	296	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	404	19	5%	457	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	445	14	3%	557	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	445	14	3%	557	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	340	9	3%	396	3%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	340	9	3%	396	3%
	d/s LIDSL	LC_LC4	LI8	4.3	314	7.4	3%	324	3%
	MU2 Summary								
	Overall % effect (characterized areas)						2%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	166	1.18	1%	78	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	164	1.1	1%	74	0%
	d/s Elkford Sewage Ponds		ELDEL	41	164	1.10	1%	74	0%
	u/s Fording R.		ELUFO	13	164	1.10	1%	74	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2137	83	4%	1764	26%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1072	13	1%	1374	19%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	221	4.0	2%	153	1%
	d/s Grave Cr.		ELDGR	8.1	221	4.0	2%	153	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	2.9	2%	145	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	163	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	163	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	163	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	244	4.0	2%	211	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	244	4.0	2%	211	1%
	d/s EVO	EV_MC1	MI2	0.71	243	3.9	2%	207	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	304	0.83	0%	292	2%
	d/s Harmer Cr.		GRCK	2.3	207	0.5	0%	163	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	207	0.5	0%	163	1%
	Otto Cr.	EV_OC1	OCNM	0.54	283	0.93	0%	78	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.188	0%	77	0%
	Balmer Creek	EV_BLM2	BACK	0.53	275	10.3	4%	133	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1314	15	1%	867	11%
	Gate Creek	EV_GT1	GATE	1.2	1987	63	3%	1496	21%
	Bodie Cr.	EV_BC1	BOCK	0.86	2099	84	4%	1551	22%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		2%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	216	2.8	1%	156	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	210	2.6	1%	117	1%
	d/s Fernie		ELDFE	50	210	2.6	1%	117	1%
	u/s Elko	RG_ELKORES	ELELKO	29	206	2.1	1%	103	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	190	1.62	1%	83	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-23: Integrated Effects Table for Amphibians – 2025

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	189	3.0	2%	226	1%
	u/s Clode Cr.		FOUCL	0.23	189	3.0	2%	226	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	189	3.0	2%	226	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	189	3.0	2%	226	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	189	3.0	2%	226	1%
	u/s Shandley Cr.		FOUSH	1.5	189	3.0	2%	226	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	350	10	3%	464	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	350	10	3%	464	4%
	d/s future AWTF-S		SCOUTDS	0.078	350	10	3%	464	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	391	10	3%	616	7%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	438	11	3%	614	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	438	11	3%	614	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	438	11	3%	614	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	602	18	3%	598	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	578	17	3%	572	6%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	578	17	3%	572	6%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	578	17	3%	572	6%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	578	17	3%	572	6%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	413	11	3%	362	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	226	4.3	2%	313	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1083	13	1%	741	8%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	1384	94.4	7%	1094	14%
	Kilmarnock Creek	FR_KC1	KICK	2.4	668	102	15%	1345	19%
	Swift Creek	GH_SC1-2	SWCK	0.8	2809	27	1%	2204	33%
	Cataract Creek	GH_CC1	CATCK	0.33	2908	31	1%	2202	33%
	Porter Creek	GH_PC1	POCK	0.26	772	0.7	0%	555	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	362	13.51	4%	408.1	4%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	194	7.97	4%	240.3	2%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	702	3.9	1%	901	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	702	3.9	1%	901	11%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					98%		95%
		L1-L2					1%		4%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	413	11	3%	362	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	376	9	3%	312	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	376	9	3%	312	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	405	17	5%	462	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	449	13	3%	576	6%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	449	13	3%	576	6%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	343	8	3%	416	4%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	343	8	3%	416	4%
	d/s LIDSL	LC_LC4	LI8	4.3	317	7.3	3%	340	3%
	MU2 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	165	1.04	1%	79	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	0.97	1%	75	0%
	d/s Elkford Sewage Ponds		ELDEL	41	163	0.97	1%	75	0%
	u/s Fording R.		ELUFO	13	163	0.97	1%	75	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2108	71	4%	1800	26%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1133	11	1%	1392	19%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	220	3.6	2%	157	1%
	d/s Grave Cr.		ELDGR	8.1	220	3.6	2%	157	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	211	2.7	1%	150	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	164	0.7	0%	91	0%
	d/s Erickson Cr.		MIDER	1.1	164	0.7	0%	91	0%
	d/s Gate Cr.		MIDGA	0.074	164	0.7	0%	91	0%
	d/s Bodie Cr.		MIDBO	0.19	245	4.5	2%	229	2%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	245	4.5	2%	229	2%
	d/s EVO	EV_MC1	MI2	0.71	244	4.3	2%	223	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	309	0.75	0%	303	2%
	d/s Harmer Cr.		GRCK	2.3	208	0.5	0%	171	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	208	0.46	0%	171	1%
	Otto Cr.	EV_OC1	OCNM	0.54	285	1.0	0%	82	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.17	0%	78	0%
	Balmer Creek	EV_BLM2	BACK	0.53	290	9.29	3%	142	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1406	20	2%	943	12%
	Gate Creek	EV_GT1	GATE	1.2	2058	61	3%	1612	23%
	Bodie Cr.	EV_BC1	BOCK	0.86	2187	84	4%	1648	24%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		2%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	215	2.7	1%	161	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	208	2.4	1%	122	1%
	d/s Fernie		ELDFE	50	208	2.4	1%	122	1%
	u/s Elko	RG_ELKORES	ELELKO	29	204	2.0	1%	106	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	189	1.53	1%	85	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-24: Integrated Effects Table for Amphibians – 2026

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	190	2.3	1%	211	1%
	u/s Clode Cr.		FOUCL	0.23	190	2.3	1%	211	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	190	2.3	1%	211	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	190	2.3	1%	211	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	190	2.3	1%	211	1%
	u/s Shandley Cr.		FOUSH	1.5	190	2.3	1%	211	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	351	9	3%	456	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	351	9	3%	456	4%
	d/s future AWTF-S		SCOUTDS	0.078	351	9	3%	456	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	388	9	2%	583	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	432	10	3%	583	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	432	10	3%	583	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	432	10	3%	583	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	604	16	3%	585	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	582	16	3%	556	6%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	582	16	3%	556	6%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	582	16	3%	556	6%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	582	16	3%	556	6%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	405	10	3%	353	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	224	3.5	2%	313	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1084	11	1%	779	9%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	1409	78.1	6%	1085	14%
	Kilmarnock Creek	FR_KC1	KICK	2.4	658	91	14%	1305	18%
	Swift Creek	GH_SC1-2	SWCK	0.8	2822	28	1%	2154	32%
	Cataract Creek	GH_CC1	CATCK	0.33	2908	28	1%	2173	32%
	Porter Creek	GH_PC1	POCK	0.26	771	0.6	0%	555	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	343	11.4	4%	377.4	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	193	6.77	4%	218.6	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	722	3.0	0%	889	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	722	3.0	0%	889	11%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					98%		95%
		L1-L2					1%		4%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	405	10	3%	353	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	370	8	2%	285	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	370	8	2%	285	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	354	13	4%	447	4%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	402	6	2%	350	3%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	402	6	2%	350	3%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	314	4	1%	263	2%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	314	4	1%	263	2%
	d/s LIDSL	LC_LC4	LI8	4.3	293	3.5	1%	222	1%
	MU2 Summary								
	Overall % effect (characterized areas)						1%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	164	0.9	1%	79	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	0.84	1%	75	0%
	d/s Elkford Sewage Ponds		ELDEL	41	163	0.84	1%	75	0%
	u/s Fording R.		ELUFO	13	163	0.84	1%	75	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2109	60	3%	1820	27%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1037	9	1%	1389	19%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	219	3.0	1%	149	1%
	d/s Grave Cr.		ELDGR	8.1	219	3.0	1%	149	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	210	2.3	1%	142	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	165	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	165	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	165	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	242	4.1	2%	225	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	242	4.1	2%	225	1%
	d/s EVO	EV_MC1	MI2	0.71	241	4.0	2%	220	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	314	0.74	0%	307	2%
	d/s Harmer Cr.		GRCK	2.3	210	0.4	0%	174	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	210	0.44	0%	174	1%
	Otto Cr.	EV_OC1	OCNM	0.54	296	1.69	1%	86	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.15	0%	76	0%
	Balmer Creek	EV_BLM2	BACK	0.53	289	7.69	3%	143	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1474	23	2%	978	12%
	Gate Creek	EV_GT1	GATE	1.2	2096	58	3%	1647	24%
	Bodie Cr.	EV_BC1	BOCK	0.86	2131	67	3%	1449	20%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		2%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	215	2.4	1%	156	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	208	2.1	1%	119	1%
	d/s Fernie		ELDFE	50	208	2.1	1%	119	1%
	u/s Elko	RG_ELKORES	ELELKO	29	205	1.8	1%	106	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	189	1.33	1%	85	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-25: Integrated Effects Table for Amphibians – 2027

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	192	1.9	1%	213	1%
	u/s Clode Cr.		FOUCL	0.23	192	1.9	1%	213	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	192	1.9	1%	213	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	192	1.9	1%	213	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	192	1.9	1%	213	1%
	u/s Shandley Cr.		FOUSH	1.5	192	1.9	1%	213	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	350	9	3%	474	4%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	350	9	3%	474	4%
	d/s future AWTF-S		SCOUTDS	0.078	350	9	3%	474	4%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	383	9	2%	493	5%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	430	10	2%	496	5%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	430	10	2%	496	5%
	u/s Porter	FR_FRRD	FRUPO	2.2	430	10	2%	496	5%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	606	14	3%	531	5%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	588	14	3%	507	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	588	14	3%	507	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	588	14	3%	507	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	588	14	3%	507	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	410	9	2%	337	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	222	2.9	1%	313	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	955	10	1%	769	9%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	670	34	5%	863	10%
	Swift Creek	GH_SC1-2	SWCK	0.8	2912	32	1%	2192	32%
	Cataract Creek	GH_CC1	CATCK	0.33	2935	25	1%	2157	32%
	Porter Creek	GH_PC1	POCK	0.26	770	0.5	0%	554	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	363	10.35	3%	350.2	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	193	6.41	4%	213.1	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	711	2.6	0%	881	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	711	2.6	0%	881	11%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					99%		95%
		L1-L2					0%		3%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	410	9	2%	337	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	381	7	2%	275	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	381	7	2%	275	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	379	12	4%	534	5%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	423	7	2%	404	4%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	423	7	2%	404	4%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	329	4	1%	298	2%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	329	4	1%	298	2%
	d/s LIDSL	LC_LC4	LI8	4.3	306	3.4	1%	246	2%
	MU2 Summary								
	Overall % effect (characterized areas)						1%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	165	0.8	1%	80	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	163	0.75	1%	76	0%
	d/s Elkford Sewage Ponds		ELDEL	41	163	0.75	1%	76	0%
	u/s Fording R.		ELUFO	13	163	0.75	1%	76	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2127	50	3%	1833	27%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1076	8	1%	1384	19%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	221	2.7	1%	149	1%
	d/s Grave Cr.		ELDGR	8.1	221	2.7	1%	149	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	2.1	1%	143	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	165	0.7	0%	91	0%
	d/s Erickson Cr.		MIDER	1.1	165	0.7	0%	91	0%
	d/s Gate Cr.		MIDGA	0.074	165	0.7	0%	91	0%
	d/s Bodie Cr.		MIDBO	0.19	245	4.5	2%	251	2%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	245	4.5	2%	251	2%
	d/s EVO	EV_MC1	MI2	0.71	245	4.4	2%	245	2%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	324	1.35	0%	323	3%
	d/s Harmer Cr.		GRCK	2.3	214	0.7	0%	183	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	214	0.66	0%	183	1%
	Otto Cr.	EV_OC1	OCNM	0.54	314	2.63	1%	98	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.138	0%	77	0%
	Balmer Creek	EV_BLM2	BACK	0.53	284	6.35	2%	144	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1564	26	2%	1040	13%
	Gate Creek	EV_GT1	GATE	1.2	1955	47	3%	1633	24%
	Bodie Cr.	EV_BC1	BOCK	0.86	2064	55	3%	1415	20%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		2%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	216	2.2	1%	162	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	210	1.9	1%	123	1%
	d/s Fernie		ELDFE	50	210	1.9	1%	123	1%
	u/s Elko	RG_ELKORES	ELELKO	29	207	1.6	1%	108	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	191	1.22	1%	87	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-26: Integrated Effects Table for Amphibians – 2028

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	193	1.5	1%	206	1%
	u/s Clode Cr.		FOUCL	0.23	193	1.5	1%	206	1%
	u/s North Greenhills Diversion		FOUNGD	1.5	193	1.5	1%	206	1%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	193	1.5	1%	206	1%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	193	1.5	1%	206	1%
	u/s Shandley Cr.		FOUSH	1.5	193	1.5	1%	206	1%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	366	9	3%	496	5%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	366	9	3%	496	5%
	d/s future AWTF-S		SCOUTDS	0.078	366	9	3%	496	5%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	404	9	2%	513	5%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	449	9	2%	511	5%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	449	9	2%	511	5%
	u/s Porter	FR_FRRD	FRUPO	2.2	449	9	2%	511	5%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	606	12	2%	525	5%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	581	11	2%	500	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	581	11	2%	500	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	581	11	2%	500	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	581	11	2%	500	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	414	9	2%	331	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	224	2.4	1%	314	2%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1009	11	1%	839	10%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	683	30	5%	845	10%
	Swift Creek	GH_SC1-2	SWCK	0.8	2944	32	1%	2222	33%
	Cataract Creek	GH_CC1	CATCK	0.33	2960	24	1%	2199	33%
	Porter Creek	GH_PC1	POCK	0.26	769	0.4	0%	554	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	389	8.01	2%	338.9	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	217	5.23	3%	205.0	1%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	717	1.4	0%	873	11%
	Greenhills Creek	GH_GH1	GHCKD	0.24	717	1.4	0%	873	11%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					99%		94%
		L1-L2					0%		4%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	414	9	2%	331	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	384	7	2%	283	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	384	7	2%	283	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	380	11	3%	555	6%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	436	5	1%	424	4%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	436	5	1%	424	4%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	333	3	1%	312	2%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	333	3	1%	312	2%
	d/s LIDSL	LC_LC4	LI8	4.3	309	3.0	1%	254	2%
	MU2 Summary								
	Overall % effect (characterized areas)						1%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	160	0.59	0%	71	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	159	0.55	0%	67	0%
	d/s Elkford Sewage Ponds		ELDEL	41	159	0.55	0%	67	0%
	u/s Fording R.		ELUFO	13	159	0.55	0%	67	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	2045	49	3%	1859	27%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	1046	6	1%	1398	20%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	221	2.2	1%	138	1%
	d/s Grave Cr.		ELDGR	8.1	221	2.2	1%	138	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	212	1.8	1%	135	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	254	2.8	1%	219	1%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	254	2.8	1%	219	1%
	d/s EVO	EV_MC1	MI2	0.71	253	2.8	1%	214	1%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	336	1.62	1%	333	3%
	d/s Harmer Cr.		GRCK	2.3	219	0.9	0%	189	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	219	0.91	0%	189	1%
	Otto Cr.	EV_OC1	OCNM	0.54	321	2.66	1%	106	0%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.125	0%	76	0%
	Balmer Creek	EV_BLM2	BACK	0.53	284	4.92	2%	138	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	1627	18	1%	1030	13%
	Gate Creek	EV_GT1	GATE	1.2	1809	28	2%	1318	18%
	Bodie Cr.	EV_BC1	BOCK	0.86	1751	29	2%	1233	17%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		2%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	219	1.9	1%	151	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	212	1.7	1%	117	1%
	d/s Fernie		ELDFE	50	212	1.7	1%	117	1%
	u/s Elko	RG_ELKORES	ELELKO	29	208	1.4	1%	105	0%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	191	1.06	1%	84	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.

Table A-27: Integrated Effects Table for Amphibians – 2029-2053

Management Unit	Area Description	WQ Station Code	Biological Area Code	Avg Flow Total Habitat (ha)	Hardness (mg/L as $CaCO_3$)	Nitrate		Sulphate	
						[NO_3] (mg/L N)	Sensitive Species (*L. pipiens*)	[SO_4] (mg/L)	Sensitive Species (*L. pipiens*)
MU1	**Mainstem Fording River**								
	u/s Henretta Cr. and FRO	*FR_UFR1*	*FO26*	*16*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Henretta Cr.	FR_FR1	FODHE	2.9	206	2.8	2%	270	2%
	u/s Clode Cr.		FOUCL	0.23	206	2.8	2%	270	2%
	u/s North Greenhills Diversion		FOUNGD	1.5	206	2.8	2%	270	2%
	d/s North Greenhills Diversion	FR_FRABEC1	FODNGD	0.56	206	2.8	2%	270	2%
	Multiplate Culvert	FR_MULTIPLATE	MP1	0.89	206	2.8	2%	270	2%
	u/s Shandley Cr.		FOUSH	1.5	206	2.8	2%	270	2%
	u/s Kilmarnock Cr.	FR_FR2	FOUKI	0.92	418	10	3%	580	6%
	d/s Kilmarnock & u/s Swift Cr.	GH_FR3	FOBKS	2.5	418	10	3%	580	6%
	d/s future AWTF-S		SCOUTDS	0.078	418	10	3%	580	6%
	d/s Swift Cr., u/s Cataract Cr.	FR_FR4, GH_FR	FOBSC	0.71	452	10	2%	592	6%
	d/s Cataract, u/s Porter	FR_FRCP1	FOBCP	1.4	491	10	2%	584	6%
	1 km SW of Fording R Compliance		FRCP1SW	1.4	491	10	2%	584	6%
	u/s Porter	FR_FRRD	FRUPO	2.2	491	10	2%	584	6%
	d/s Porter Cr., u/s Chauncey Cr.	GH_PC2	FODPO	1.9	641	11	2%	565	6%
	u/s Chauncey Creek	FR_FRABCH	FO22	2.0	620	10	2%	538	5%
	d/s Chauncey Cr., u/s Ewin Cr.	FR_FR5	FOUEW	11	620	10	2%	538	5%
	Fording River u/s Dry Creek	LC_FRUS	FO28	5.0	620	10	2%	538	5%
	d/s Dry Cr., u/s GHO	LC_FRB	FO29	8.9	620	10	2%	538	5%
	d/s GHO and Greenhills Cr.	GH_FR1	FODGH	2.5	448	8	2%	352	3%
	Tributaries								
	Henretta Creek	*FR_HC3*	*HENUP*	*10.0*	*116*	*0.037*	*0%*	*33*	*0%*
	Chauncey Creek	*RG_CH1*	*CHCK*	*23*	*116*	*0.037*	*0%*	*33*	*0%*
	Ewin Creek		*EWCK*	*45*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*40*	*116*	*0.037*	*0%*	*33*	*0%*
	Henretta Creek	FR_HC1	HENFO	5.4	242	4.3	2%	367	3%
	Fish Pond Creek	FR_FC1	FR_FC1	0.29	-	-	-	-	-
	Clode Creek	FR_CC1	CLODE	0.98	1968	12	1%	1450	20%
	Lake Mountain Creek	FR_NGD1	NGD1	1.5	-	-	-	-	-
	Kilmarnock Creek	FR_KC1	KICK	2.4	697	28	4%	870	11%
	Swift Creek	GH_SC1-2	SWCK	0.8	3167	48	2%	2411	36%
	Cataract Creek	GH_CC1	CATCK	0.33	3259	22	1%	2470	37%
	Porter Creek	GH_PC1	POCK	0.26	770	0.3	0%	557	6%
	LCO Dry Creek	LC_DCDS	LC_DCDS	5.8	524	7.63	2%	370.2	3%
	LCO Dry Creek	LC_DC1	LC_DC1	0.68	257	4.97	2%	238.0	2%
	Unnamed Creek		LC_UC	1.2	-	-	-	-	-
	Greenhills Creek		GHCKU	4.1	743	1.2	0%	970	12%
	Greenhills Creek	GH_GH1	GHCKD	0.24	743	1.2	0%	970	12%
	MU1 Summary								
	Overall % effect (characterized areas)						1%		2%
	Proportion of MU1 with effect of	<L1					99%		94%
		L1-L2					0%		3%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU2	**Mainstem Fording River**								
	d/s Josephine Falls		FO9	9.1	448	8	2%	352	3%
	d/s Grace Cr.	LC_LC6	FRUL	15	409	6	2%	301	2%
	d/s Line Cr.	LC_LC5	FO23	5.9	409	6	2%	301	2%
	Tributaries								
	Grace Cr.	*LC_GRCK*	*LC_GRCK*	*7.7*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s LCO	*LC_LC1*	*LI24*	*15*	*116*	*0.037*	*0%*	*33*	*0%*
	South Line Cr.	*LC_SLC*	*SLINE*	*11*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*14*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s West Line Cr.	LC_LCUSWLC	LCUT	2.8	383	10	3%	600	6%
	d/s West Line Cr.	LC_LC3	LILC3	0.76	529	5	1%	450	4%
	d/s pond discharge	WL_DCP_SP24	LISP24	0.75	529	5	1%	450	4%
	d/s South Line Cr. Confluence	LC_LCDSSLCC	LIDSL	2.2	393	3	1%	341	3%
	d/s LIDSL	LC_LCC	LIDCOM	8.9	393	3	1%	341	3%
	d/s LIDSL	LC_LC4	LI8	4.3	361	3.0	1%	286	2%
	MU2 Summary								
	Overall % effect (characterized areas)						1%		1%
	Proportion of MU2 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Fording with effect (characterized areas)	<L1					100%		100%
MU3	**Mainstem Elk River**								
	u/s GHO	*GH_ER2*	*ELUGH*	*303*	*116*	*0.037*	*0%*	*33*	*0%*
	d/s Thompson Cr.	GH_ERC	EL20	18	177	1.63	1%	106	0%
	u/s Boivin Cr.	GH_ER1	ELUEL	14	174	1.52	1%	100	0%
	d/s Elkford Sewage Ponds		ELDEL	41	174	1.52	1%	100	0%
	u/s Fording R.		ELUFO	13	174	1.52	1%	100	0%
	Tributaries								
	Michelson Cr.	*GH_MC1*	*-*	*1.1*	*116*	*0.037*	*0%*	*33*	*0%*
	Unnamed tributary west of Elk River		*UCWER*	*17*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*168*	*116*	*0.037*	*0%*	*33*	*0%*
	Elk River Side Channel	GH_ERSC4	GH_ERSC4	*4.1*	-	-	-	-	-
	Elk River Side Channel	GH_ER1A	GH_ER1A	*0.42*	-	-	-	-	-
	Elk River Side Channel	RG_ERSC5	ERSC5	*0.47*	-	-	-	-	-
	Side Channel d/s Thompson Cr.	RG_SCDTC	SCDTC	*1.4*	-	-	-	-	-
	Leask Cr.	GH_LC1	-	3.0	3154	135	5%	2186	32%
	Wolfram Cr.	GH_WC2	WOCK	0.41	-	-	-	-	-
	Thompson Cr.	GH_TC1	THCK	0.036	2082	18	1%	1744	25%
	MU3 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU3 with effect of	<L1					99%		98%
		L1-L2					0%		0%
		L2-L3					0%		1%
		>L3					0%		0%
		Uncharacterized areas					1%		1%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU4	**Mainstem Elk River**								
	u/s Grave Cr.	EV_ER4	EL19	11	231	2.1	1%	144	1%
	d/s Grave Cr.		ELDGR	8.1	231	2.1	1%	144	1%
	d/s Otto Cr.	EV_ER2	ELUSP	6.1	221	1.8	1%	142	1%
	Mainstem Michel Creek								
	u/s CMO	*CM_MC1*	*MI25*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Corbin Cr.		MIUCO	3.2	116	0.037	0%	33	0%
	d/s Corbin Cr.	CM_MC2	MIDCO	1.7	348	2.5	1%	311	2%
	d/s Andy Good Cr.	CM_MCTM	MIDAG	2.3	348	2.5	1%	311	2%
	u/s Leach Cr.		MIULE	7.2	348	2.5	1%	311	2%
	u/s Wheeler Cr.		MI5	4.9	348	2.5	1%	311	2%
	u/s Erickson Cr.	EV_MC3	MI3	11	167	0.7	0%	92	0%
	d/s Erickson Cr.		MIDER	1.1	167	0.7	0%	92	0%
	d/s Gate Cr.		MIDGA	0.074	167	0.7	0%	92	0%
	d/s Bodie Cr.		MIDBO	0.19	278	3.2	1%	294	2%
	Lower Michel Compliance	EV_MC2	MICOMP	0.71	278	3.2	1%	294	2%
	d/s EVO	EV_MC1	MI2	0.71	277	3.1	1%	287	2%
	Tributaries								
	u/s Harmer Cr.	*EV_GV3*	*GRUHA*	*12*	*116*	*0.037*	*0%*	*33*	*0%*
	Andy Good Creek	*CM_AG1*	*AGCK*	*13*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Mid-creek		*AL4*	*50*	*116*	*0.037*	*0%*	*33*	*0%*
	Leach Creek		*LE1*	*67*	*116*	*0.037*	*0%*	*33*	*0%*
	Alexander Cr. Near bend to West	*EV_AC2*	*ALUSM*	*36*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*160*	*116*	*0.037*	*0%*	*33*	*0%*
	u/s Harmer Pond	EV_HC6	HACKUS	12	125	0.118	0%	14	0%
	d/s Harmer Pond	EV_HC1	HACKDS	0.53	446	2.24	1%	384	3%
	d/s Harmer Cr.		GRCK	2.3	271	1.2	0%	217	1%
	mouth at Elk R.	EV_GV1	GRDS	0.52	271	1.2	0%	217	1%
	Otto Cr.	EV_OC1	OCNM	0.54	347	2.25	1%	116	1%
	Six-mile Creek	EV_SM1	SMCK	0.58	162	0.117	0%	78	0%
	Balmer Creek	EV_BLM2	BACK	0.53	286	4.11	2%	144	1%
	Corbin Cr.	CM_CC1	CORCK	2.0	-	-	-	-	-
	Erickson Cr.	EV_EC1	ERCK	8.4	2219	20	1%	1606	23%
	Gate Creek	EV_GT1	GATE	1.2	1944	34	2%	1488	21%
	Bodie Cr.	EV_BC1	BOCK	0.86	1998	44	2%	1515	22%
	MU4 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU4 with effect of	<L1					100%		97%
		L1-L2					0%		0%
		L2-L3					0%		2%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%
MU5	**Mainstem Elk River**								
	d/s Sparwood	EV_ER1	EL1	0.18	229	1.8	1%	164	1%
	u/s Fernie	RG_ELKFERNIE	ELUFE	58	221	1.6	1%	128	1%
	d/s Fernie		ELDFE	50	221	1.6	1%	128	1%
	u/s Elko	RG_ELKORES	ELELKO	29	217	1.3	1%	113	1%
	u/s Hwy 93 bridge	RG_ELKMOUTH	ELH93	78	198	1.0	1%	90	0%
	Tributaries								
	McCool Creek		*MCCR*	*9.2*	*116*	*0.037*	*0%*	*33*	*0%*
	Upper Wigwam R.		*WWRU*	*206*	*116*	*0.037*	*0%*	*33*	*0%*
	Lower Wigwam R.		*WWRL*	*292*	*116*	*0.037*	*0%*	*33*	*0%*
	Other reference tributaries		*-*	*264*	*116*	*0.037*	*0%*	*33*	*0%*
	MU5 Summary								
	Overall % effect (characterized areas)						0%		0%
	Proportion of MU5 with effect of	<L1					100%		100%
		L1-L2					0%		0%
		L2-L3					0%		0%
		>L3					0%		0%
		Uncharacterized areas					0%		0%
	Proportion of Elk with effect (characterized areas)	<L1					100%		100%

Notes: Red font indicates values estimated from other upstream or downstream subunits. Grey font indicates values less than detection limit. Italicized rows are reference areas.