# Site C Clean Energy Project

# Offset Effectiveness Monitoring of Side Channel Site 108R

# Construction Year 7 (2021)

***Peace River Fish Community Monitoring Program (Mon-2, Task 2d)***
***Peace River Physical Habitat Monitoring Program (Mon-3, Task 2c)***

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**September 15, 2022**

# Site C Clean Energy Project

## Offset Effectiveness Monitoring of Side Channel Site 108R – Year 2

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## EXECUTIVE SUMMARY

This report describes the second year of Offset Effectiveness Monitoring (OEM) conducted in the late summer and fall of 2021 at Side Channel Site 108R of the Site C Clean Energy Project (the Project). Side Channel Site 108R consists of constructed and modified aquatic stream channels for fish habitat. This study includes effectiveness monitoring of physical habitat attributes and fish use of the offsetting habitats. Overall, the modified and constructed habitats represent new high-quality habitat, as indicated by habitat suitability results and fish use data. The offset channels are being used by fish, particularly by Mountain Whitefish. This study indicates that while most of Side Channel Site 108R has retained its design, some physical changes occurred after construction, including minor substrate aggradation and deposition within channels.

### Background

The objectives of Side Channel Site 108R are to increase the quantity and quality of permanently wetted habitat to support primary and secondary productivity as food production for fish, and to provide rearing and feeding habitats for fish. Side Channel Site 108R was also designed to reduce fish stranding, and increase the complexity and variability of fish habitat, to support a variety of life stages of local fish populations.

The Offsetting Plans specified that following completion of construction, effectiveness monitoring at Side Channel Site 108R would be undertaken to verify the following:

- The offsets have been implemented as designed and approved;
- The offsets maintain their design and purpose over time; and
- The offsets are biologically effective (i.e., support ongoing productivity).

Monitoring at Side Channel Site 108R was broken into two data components which support the above offsetting objectives. The physical habitat study applies to the first two points above, while the fish community study supports the third. The findings for both physical habitat and fish community are summarized below.

### Physical Habitat

The objective of OEM for physical habitat is to ensure that offsetting channels within Side Channel Site 108R maintain their structure and function over time. Each year the channels are evaluated for changes to channel bedform and to fish habitat suitability by measuring water depths, water velocities, substrate composition, and habitat characteristics (e.g., presence of large woody debris).

Surveys of the longitudinal bed profiles of the offset habitats show that bed profiles in the Main Channel Bar, Backwater Channel, and South Side Channel Spur Extension matched the design, while the East and West Side Channels showed some changes from the design drawings, as-built surveys, and Year 1 surveys. The changes observed in Year 2 likely resulted primarily from erosion and aggradation processes. Visual assessment of the offset channels at low flow (Peace River discharge

of 450 $m^3/s$) confirmed that cobble aggradation was visible at the upstream end of the East Side Channel, which resulted in a roughly 150 m stretch of dewatered channel at this flow level. Fine sediment deposition was also observed at the downstream ends of the West Side Channel, South Side Channel, and Backwater Channel.

Despite the changes noted above for the East and West Side Channels, the offset channels continue to provide viable habitat for a variety of species in Year 2. At the flows measured (743 – 1,100 $m^3s$), moderate habitat suitability (i.e., 30-60% habitat usability) was observed for juvenile Mountain Whitefish in the slower velocity habitats (i.e., the Backwater Channel, East Side Channel, and South Side Channel Spur Extension). Moderate to high suitability (i.e., >60% habitat usability) was observed for adult Mountain Whitefish in all offset habitats. Moderate suitability was observed for Rainbow Trout (juveniles and adults), with the highest suitability found in the East and West Side Channels. High suitability was found for Arctic Grayling (both juveniles and adults) in the East Side Channel, the South Side Channel Spur Extension, and the Backwater Channel, while low suitability (i.e., <30% habitat usability) was found in the Main Channel Bar and the West Side Channel.

The condition of engineered log jam structures, substrates, and vegetation was assessed visually at low flow conditions (Peace River discharge of 450 $m^3/s$). Engineered logjams were in place and providing complex habitat. Aquatic vegetation was generally not visible within the channels, with the exception of the Backwater Channel, where macrophytes and algae were observed.

**Fish Community**

A second year of fish community monitoring of fish species using Side Channel Site 108R was undertaken. The monitoring of Side Channel Site 108R was based on a sample design that targeted several indicator species outlined in the BC Hydro Site C Fisheries and Aquatic Habitat Monitoring and Follow-up Program (FAHMFP; BC Hydro 2015a). Sample methods within Side Channel Site 108R included large-fish boat electroshocking for deeper sections and small-fish boat electroshocking or backpack electrofishing for shallower sections. Additionally, minnow/hoop traps, gillnets, and beach seines were deployed in low velocity sections. Among electrofishing methods, the indicator species catch was dominated by Mountain Whitefish, with a few Bull Trout, Burbot, Walleye and a single Rainbow Trout encountered. Both small fish and large fish boat electroshocking had a substantial catch of Mountain Whitefish, the primary species Side Channel Site 108R was designed for. Mountain Whitefish were most commonly captured in the Main Channel Bar, and the East and West Side Channels.

Non-electrofishing methods (minnow and hoop traps, gill nets, and beach seines) primarily captured non-indicator species. The most commonly captured non-indicator species/groups included Sucker spp., Slimy Sculpin (*Cottus cognatus*), and Longnose Dace (*Rhinichthys cataractae*).

This report represents Year 2 of offset environmental monitoring at Side Channel Site 108R. Further monitoring is planned to occur in 2022 (Year 3). Recommendations for the Year 3 study can be found in a separate recommendations memo (Whelan and Sherstone 2022).

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# 1. INTRODUCTION AND BACKROUND

## 1.1. Introduction

This report provides a summary of Year 2 of Offset Effectiveness Monitoring (OEM) at Side Channel Site 108R in 2021, the second year of monitoring after construction. The monitoring focused on two components within the offsetting channels: physical habitat monitoring, and fish community. This report represents the second of three monitoring years; final conclusions will be made in the Program Summary report in Year 3.

A large habitat offsetting area (named Side Channel Site 108R in reference to its location on river right at Km 108[1]) was constructed downstream of the Site C dam site to increase aquatic habitat. Habitat improvements were made to several existing channels, and in some locations, new habitat was constructed. The objective of the offsetting was to provide additional high-quality habitat for several species identified as key members of the Peace River fish community (Site C Fish and Aquatic Habitat Monitoring and Follow up Program (FAHMFP); BC Hydro 2015a).

## 1.2. Offsetting Background

Fish and fish habitat are valued components of the Peace River that are considered important by BC Hydro, Indigenous Nations, the public, the scientific community, and government agencies. The Site C Clean Energy Project (the Project), including Project construction, reservoir filling, and operation, could affect fish and fish habitat via three key pathways: changes to fish habitat, fish health and survival, and fish movement [2]. Habitat offsetting is seen as a key measure to mitigate such affects, including the offsetting constructed at Side Channel Site 108R.

The offset effectiveness monitoring of side channel site 108R fulfills several regulatory requirements for the Project. One set of requirements relate to the Project's two *Fisheries Act* Authorizations (FAAs) under Section 35(2) of the *Fisheries Act* (DFO 2015: 15-HPAC-00170, DFO 2016; 15-HPAC-01160). These FAAs require that BC Hydro implement the following: 1) an Offsetting Plan for the FAA for Site Preparation, and 2) an Offsetting Plan for the FAA for Dam Construction, Reservoir Preparation and Filling. Another monitoring requirement is described under the Project's FAHMFP (BC Hydro 2015a). Monitoring of Side Channel Site 108R was specified under Task 2d of the Mon-2 Peace River Fish Community Monitoring Program and Task 2c of the Mon-3 Peace River Physical Habitat Monitoring Program of the FAHMFP (BC Hydro 2015a).

The Offsetting Plans included habitat improvements at Side Channel Site 108R. One component of Side Channel Site 108R, described as the Backwater Channel, supports the Site Preparation

[1] All kilometre references on the Peace River are measured as the distance downstream from Bennett Dam.

[2] These paths are examined in Volume 2 of the Project's Environmental Impact Statement (EIS), available for download at: http://www.ceaa-acee.gc.ca/050/document-eng.cfm?document=85328.

Offsetting Plan, and the remainder of Side Channel Site 108R falls under the Dam Construction, Reservoir Preparation and Filling Offsetting Plan (BC Hydro 2015b, 2015c).

The offsetting measures were designed to:

- Increase the quantity and quality of available, permanently wetted habitat to support primary and secondary productivity as food for fish, and to provide rearing, feeding, and overwintering habitat for fish;
- Reduce fish stranding, and
- Increase the complexity and variability of fish habitat to support a variety of life stages for local fish populations.

The designs of the offsets are described in the Project's Fisheries and Aquatic Habitat Management Plan[3] (BC Hydro 2015a). The FAA application for Site Preparation (BC Hydro 2015b) provide the following summary with regards to the design of the Backwater Channel at Side Channel Site 108R:

> Approximately half (1 km) the length of the middle channel will be deepened by excavation to create a backwater effect from the Peace River over a range of operational flows, ensuring that wetted habitat is maintained. The existing habitat in this section of the side channel is shallow, low gradient, and low velocity, with fine sediments and aquatic vegetation. Channel contouring will increase depth and is expected to increase overall habitat suitability.
>
> Providing 3.66 ha of stable wetted side channel habitat will increase habitat suitability through enhanced cover and feeding areas. Habitat complexity will be increased by providing habitat features preferred by fish in a backwater habitat.

The second FAA application for Dam Construction, Reservoir Preparation, and Filling (BC Hydro 2015c) and provides the following summary with regards to the design of Site 108R:

> Overall, approximately 40 ha of Site 108R will be enhanced for the purposes of increasing permanently wetted area, habitat quality, and reducing stranding risk. Approximately 15 ha will be excavated to ensure that wetted habitat is maintained over a range of operational flows. An additional 25 ha of Side Channel Site 108R will be filled to reduce the risk of stranding associated with the dewatering of shallow water channels.
>
> The design includes opening two ephemeral side channels (referred to on the design drawings as West and East Side Channel. These channel alignments were designed to follow relic side channel alignments. In opening these channels, the channel inlets, outlets, and slopes were designed to maintain continuous wetted habitat for a range of water levels. Material from the

[3] Available for download at: https://www.sitecproject.com/sites/default/files/Fisheries_and_Aquatic_Habitat_Management_Plan.pdf.

side channel excavations can be side cast in the fill areas, which include depressed areas and inlets to other ephemeral side channels that pose a dewatering risk.

Grade control structures which include placing a layer of cobble material for a thickness of 0.5 m were included at the inlet and outlets of the side channels. Local bank protection works are included along the fill slopes where velocities are high.

Finally, the Main Channel Bar at the downstream end of the island will be lowered. Excavated material will be placed where vegetation is sparse to allow for the development of riparian vegetation. Habitat depressions will be excavated into the lowered bar to increase hydraulic complexity through the main channel over the bar. The depressions proposed are 10 to 20 m in width and 26 to 74 m in length, and vary in depth from 1.5 to 2.0 m deeper than the adjacent bed.

In summary, the enhanced Site 108R will provide approximately 3.0 km of stable, high quality, wetted side channel habitat as well as enhancements to mainstem bars that are expected to provide preferred habitats for most of the indicator fish species for rearing, overwintering, and feeding purposes.

The Side Channel Site 108R channels were designed to remain wetted through the normal range of Site C operational flows, which range from a minimum of 390 $m^3/s$ to a maximum of 2,060 $m^3/s$. The detailed design predicted the Peace River will overtop the constructed channel banks into adjacent areas at a discharge greater than approximately 2,000 $m^3/s$, and overtopping is predicted to occur approximately 8% of the time (NHC 2016).

Several Side Channel Site 108R design updates occurred following submission of the FAA Application for Dam Construction, Reservoir Preparation and Filling. In accordance with FAA condition 5.3, these changes, and final design drawings were provided to DFO 60 days prior to the start of offset construction.

Updates to the design were made based on additional site investigations and review, as well as refinement of modelling and drafting. These updates were expected to provide benefits to habitat function and result in benefits to fish. The updates were as follows:

- Flow complexity and meander in the West Side Channel was achieved by constructing a sinuous channel (new feature) rather than constructed islands (featured in the original design concepts). This design reduces potential navigation risks[4] and also facilitates natural movement of woody debris.
- The portion of the works in the Peace River at the downstream end of the site was renamed the 'Main Channel Bar'.

[4] *Navigation Protection Act* Approval (2017-500079) requires that: "Fish habitat complexes cannot fully obstruct the West, East and South Side Channel Spur Extensions and access for small boats must be maintained."

- Channel complexing was achieved using engineered log jams at point bars and embayments, rather than placement of woody debris. These larger engineered log jams are expected to be more effective channel complexing features.
- The orientation of inlets to the West and East Side Channels were reconfigured to a more sweeping alignment. This orientation mimics the entrances of natural side channels along the Peace River, improves hydraulics, reduces potential bank erosion, and facilitates woody debris transport.
- The 'fill' areas were refined to balance 'cut' and 'fill' so that no additional materials needed to be imported.
- Excavation and fill were limited in areas with fine-textured sediment that were expected to mobilize naturally as flow into the channel was increased.

Construction of offsetting habitat at Side Channel Site 108R began in 2018 and was completed in May 2020 (NHC 2020). A field fit design addition during construction included an approximately 0.5 km backwater channel between the West and East Side Channels, which is described in this report as the South Side Channel Spur Extension.

Condition 5.1.1 of the Site Preparation FAA and Conditions 6.3 and 6.4 of the Dam Construction FAA state that the Proponent shall provide an annual OEM report to DFO. The second of three years of OEM monitoring for offset area Side Channel Site 108R, supporting both the Site Preparation and Dam Construction FAAs, took place between August and October 2021. This report documents the results of monitoring for the Side Channel Site 108R Backwater Channel (Site Preparation FAA) and for the remainder of Side Channel Site 108R (Dam Construction FAA) in accordance with this condition.

### 1.3. Objectives

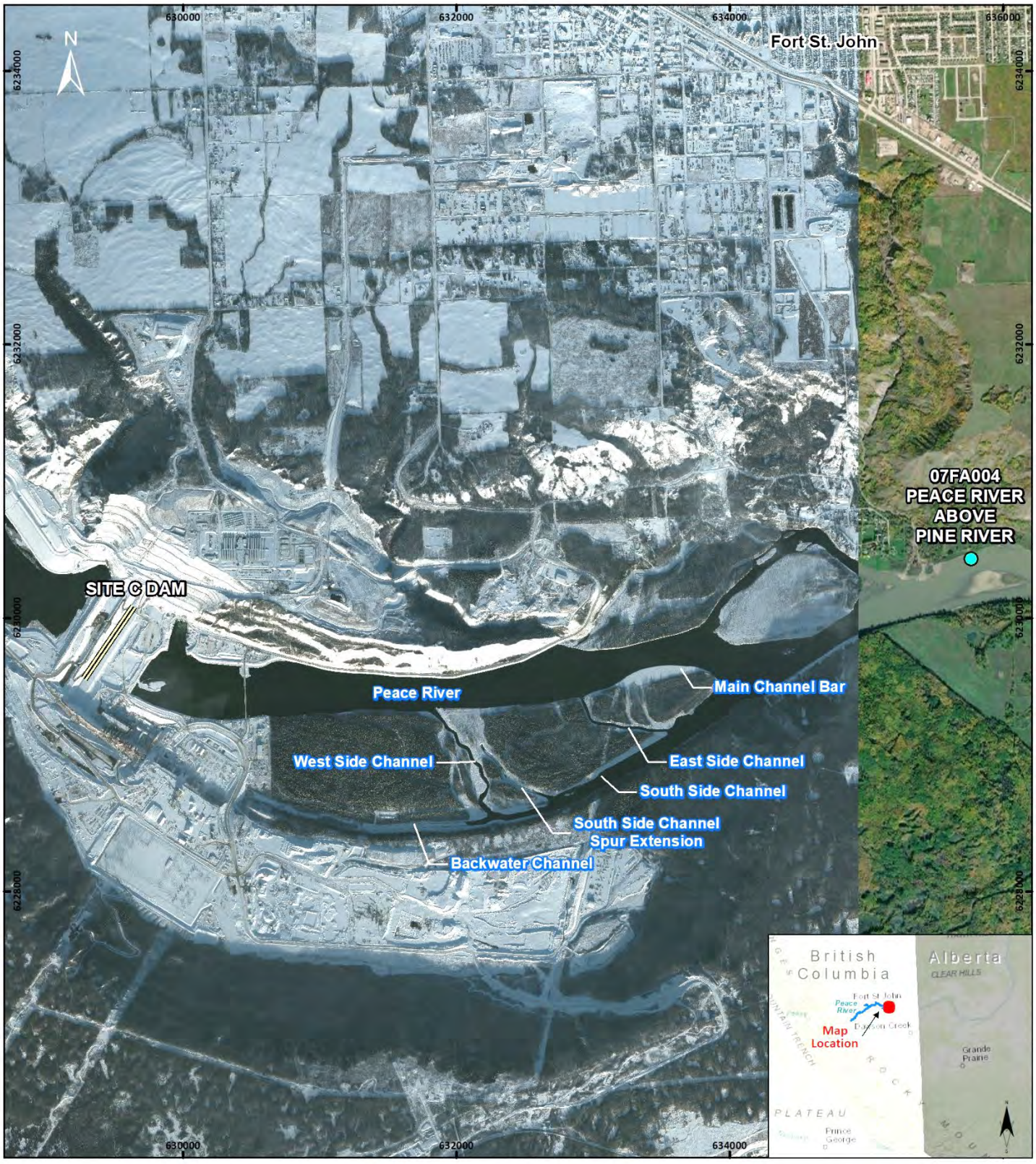
The objective of OEM at Side Channel Site 108R is to determine the biological effectiveness of the offsets (i.e., the ability of Side Channel Site 108R to support ongoing aquatic productivity). Assessment of the ability of Side Channel Site 108R to support ongoing aquatic productivity will be accomplished through two monitoring components:

- Physical habitat:
  - Monitoring will focus on the depth, velocity and substrate composition of the habitat offsetting channels.
  - Analysis will provide an understanding of the amount and suitability of fish habitat on a yearly basis.
- Fish Community:
  - Monitoring will use multiple methods for fish capture and measurement.

- Analysis will provide an understanding of species composition, species abundance, and individual fish health within the habitat offsetting channels.

The FAHMFP specifies monitoring should occur at the scale of both a site (i.e., hundreds of meters) and reach (i.e., tens of kilometres) (BC Hydro 2015a). For this study, data were specifically collected to summarize the effectiveness of the offset channels at a site-scale. Reach-scale monitoring will be achieved via other tasks specified within the Site C FAHMFP. Furthermore, the offset channels are not expected to have an immediate reach-scale effect; therefore, summaries of the reach-scale effectiveness of the offset channels will be provided during future study years.

# Site C 108R Overview Map




**Legend**

- Hydrometric Station
- Site C Dam

MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES

0 0.5 1 km

Scale: 1:40,000

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 2022-02-08 | 1200_STC_ProjectOverview_4793_20220208 | |
| 2 | | | |
| 3 | | | |
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| 5 | | | |

Date Saved: 2022-02-08
Coordinate System: NAD 1983 UTM Zone 10N

ECOFISH RESEARCH

Map 1

Path: M:\Projects-Active\1200_SiteC\MXD\Overview\1200_STC_ProjectOverview_4793_20220208.mxd

## 2. MANAGEMENT QUESTIONS

The following management questions are listed in the applications for the Site Preparation and Dam Construction FAAs (BC Hydro 2015b, 2015c):

- Are the offsets implemented as designed and approved?
- Do the offsets maintain their design and purpose over time?
- Are the offsets biologically effective (i.e., do they support ongoing productivity)?

An objective of the FAHMFP is to answer management questions that arise from the FAAs. Within the FAHMFP, Mon-2 and Mon-3 define several hypotheses that are key to addressing these questions. The first management question was addressed by NHC following construction of Side Channel Site 108R (NHC 2020). The second question is addressed by testing Hypothesis #3 of Mon-3 (BC Hydro 2015a):

> $H_3$: Site C offset habitat areas in the Peace River maintain their design and purpose over time.

The third question pertaining to biological effectiveness is addressed by testing Hypothesis #6 of Mon-2 (BC Hydro 2015a):

> $H_6$: Indicator fish species will use the Site C offset habitat areas in the Peace River between the Project and the Many Islands area in Alberta for rearing, feeding, and/or spawning.

Detailed objectives for the fish use and physical habitat components as they pertain to these management questions and associated study hypotheses are provided below.

### 2.1. Physical Habitat

The objective of the physical habitat portion of OEM is to monitor the constructed offset habitats to assess their structure and function over time. Several methods are used to accomplish this objective. Channel morphology surveys assess the condition of habitat restoration features. Surveys of channel transects and longitudinal profiles are compared to the as-built drawings (NHC 2020), to determine whether the physical characteristics of the offsetting channels are changing over time.

The functionality of the channels is also evaluated by assessing their habitat suitability. Variability in water depths, water velocities, and substrate sizes are measured over time. Using these data, Weighted Useable Area (WUA) and usability is calculated for adult and juvenile Arctic Grayling (*Thymallus arcticus*),), adult and juvenile Mountain Whitefish (*Prosopium williamsoni*), adult and juvenile Rainbow Trout (*Oncorhynchus mykiss*), and adult Walleye (*Sander vitreus*). Usability[5] for each channel will inform the OEM objective of the Peace River Fish Community Monitoring Program (Mon-2, Task 2d) and will be used to identify linkages between fish habitat and fish use (BC Hydro 2015a).

[5] Usability: the proportion of the total wetted area classified as suitable habitat for a particular fish species using habitat suitability indices (HSI). Usability is reported as a percentage in this report.

### 2.2. Fish Community

The objective of fish sampling is to monitor fish abundance and species composition. The fish community sampling targets all available fish species and life stages within the offset channels to evaluate post-construction fish use of the area. Large-fish boat electroshocking was conducted within offset areas under the Peace River Large Fish Indexing Survey (Mon-2, Task 2a; Golder 2021) and during the FAHFMP Peace River Fish Composition and Abundance Survey (Mon-2, Task 2b), and is included in this report as both tasks measured fish use within Side Channel Site 108R.

The sampling specified under OEM monitoring for Side Channel Site 108R focused on indicator species[6,7] that are expected to utilize the offset habitat within Side Channel Site 108R. Arctic Grayling, Mountain Whitefish, and Rainbow Trout are expected to utilize the offset habitat within Side Channel Site 108R for feeding and rearing, while Walleye are expected to use the site for feeding only (BC Hydro 2015a, 2015c).

## 3. METHODS

### 3.1. Physical Habitat Sampling

Physical habitat sampling was conducted on August 4 - 6 and October 1 - 2, 2021. The sampling periods were intended to target low and moderate-high flow conditions in the Peace River. During the low flow trip in August, the Peace River discharge was approximately 743 $m^3/s$, while during the moderate/high flow trip in early October, discharge varied from 865 to 1,100 $m^3/s$. The field crew surveyed water depth, riverbed elevation, and flow velocity along lateral transects and longitudinal profiles in the East and West Side Channels, the South Side Channel Spur Extension, the Backwater Channel, and along the recontoured Main Channel Bar on the river right of the Peace River (Map 2).

#### 3.1.1. Site Selection

Transects were selected in 2020; the same sites were surveyed in 2021. The transects were selected to represent each habitat feature type, based on as-built drawings provided by NHC (NHC 2020). The transects were selected to provide an even distribution of habitat features including shallow and deep section, e.g., channel depressions. They did not overlap precisely with the existing hydraulic design modelling transects because the previous cross-sections did not run perpendicular to the final channel design.

A total of 26 transects were completed: eight in the West Side Channel, five in the East Side Channel, four in the South Side Channel Spur Extension, five in the Backwater Channel, and four through the recontoured Main Channel Bar in the mainstem of the Peace River (Map 2). The transects were

[6] The Site C FAHMFP summarizes the following indicator species for the Peace River: Arctic Grayling, Bull Trout, Burbot (*Lota lota*), Goldeye (*Hiodon alosoides*), Mountain Whitefish, Rainbow Trout and Walleye.

[7] The Side Channel Site 108R offset channels were not predicted to yield measurable improvements to habitats preferred by Bull Trout, Burbot, Goldeye (BC Hydro 2015a).

divided into high priority (15 transects, which were deemed critical for the analyses of this study) and low priority (11 transects, which were to provide additional information, field time permitting). Longitudinal profiles followed the approximate location of the thalweg in each channel.

#### 3.1.2. Field Data Collection

Water depths, riverbed elevation, and flow velocities along lateral transects and longitudinal profiles were measured using an Acoustic Doppler Current Profiler (ADCP) and GPS unit carried by a remotely operated Teledyne Z-Boat 1800RP. The ADCP unit was a Teledyne RiverPro operating at 600 kHz, with a velocity profiling range of 0.2 m to 25 m and a depth sensing range of 0.2 m to 120 m. The GPS was a Hemisphere S631 GNSS antenna mounted directly to the Teledyne Z-Boat. This unit recorded horizontal and vertical position with real-time kinematic (RTK) GPS (accuracy 0.05 m to 1.00 m). When RTK GPS was not available, e.g., due to communication issues with the base station, the unit would default to differential GPS (DGPS), with an accuracy of 0.20 to 2.00 m. Additional data such as benchmark points, ADCP bottom tracks and precise water surface elevations were recorded to allow quality control of GPS data in post-processing. The resulting accuracy of the horizontal and vertical position data was sufficient for the analyses herein.

The remotely operated Z-Boat also carried equipment that enabled transmission of ADCP and GPS data through a wireless connection to a field laptop, which processed the data through Teledyne's WinRiverII real-time discharge data collection software. The crew also mounted the RTK GPS unit to a surveying rod and captured points-of-interest on the dry banks (e.g., water surface elevations, benchmarks). All points on dry land were also collected with a RTK GPS at a high degree of accuracy (less than 0.10 m variance vertically and horizontally) during both rounds of measurements.

The RTK GPS was also used to survey rebar pins, which were installed on each side of the transects in the side channels and on the river right/south bank of the Main Channel Bar. These pins helped to align the ADCP boat along the transects. Each high priority transect was surveyed for a minimum of two replicates during both rounds of data collection. All transects were surveyed from wetted edge on river left to wetted edge on river right, except for transects in the Main Channel Bar. Here, a survey past mid-channel was not required because constructed bed features only extended partway into the channel. At moderate to low velocities the Z-Boat was powerful enough to maintain position across the transect by remote control. Surveys of longitudinal bed elevation profiles were conducted by driving the Z-Boat with ADCP and GPS along the estimated location of the thalweg (as estimated by the Z-boat operator) in each channel and along the Main Channel Bar (Map 2).

Detailed surveys of riverbed elevation focused on the wetted section of each transect; the topography of the dry channel sections was not required for analysis of instream habitat conditions. The crew surveyed the wetted edge and pin location on both banks using the handheld RTK GPS. The general bank shape was derived from the wetted edge and pin surveys, and site photographs.

The crew was able to collect a full-length longitudinal bed profile in the East Side Channel in August; however, in October, despite slightly higher flows, the crew felt that shallow water in the upstream portion of the East Side Channel could present a risk to the Z-boat drive propellors. To mitigate this

risk, the ~170 m upstream portion of the East Side Channel was not surveyed. Following the East Side Channel survey, the ADCP unit stopped transmitting data via radio link. After a period of troubleshooting, it was determined that data collection in the outstanding channels could not proceed. Due to the specialized nature of the Z-boat mounted ADCP, a suitable replacement could not be procured in time to complete the surveys before freeze-up. Therefore, the crew was unable to collect longitudinal bed profiles in the West Side Channel and the South Side Channel Spur Extension in October.

Visual assessments were conducted of channel substrate composition and the integrity of large woody debris (LWD) habitat structures on September 5, 2021, under low flow conditions (between 412-490 $m^3/s$). Video and photographic data were collected along the high priority transects. A crew member collected video by wading into the channel with a GoPro HERO 7 camera attached to a 2 m pole, with the camera typically positioned approximately 30 cm off the substrate. A meter tape was placed on the channel bed[8] to provide a scale reference to support substrate size classification. In some cases, visibility was limited due to turbidity, preventing successful substrate assessments.

#### 3.1.3. Data Processing

Transect data were processed to summarize hydraulic parameters and habitat quantity for each channel. The ADCP data were exported from WinRiverII and mapped to discrete stations that were equally spaced at 0.5 m intervals. The stations at the right and left wetted edges were assigned a water depth of 0 m and water velocity of 0 m/s. Water depth and velocity at each of the mid-channel wetted stations were estimated by calculating the average ADCP water depth and depth-averaged velocity over the 0.5 m increments. If the raw data were deemed erroneous, the depth or velocity value was interpolated linearly based on data from the two nearest stations with valid data. Stations between the wetted edges and the first valid ADCP point were also interpolated linearly (where water on the channel edge was too shallow for the ADCP).

The final depth and velocity transects were processed to calculate hydraulic parameter summaries for each transect (wetted width, average water depth, average water velocity, maximum depth). Hydraulic summaries were also generated for each channel; average depth and velocity were calculated across all the transects within a channel, and total wetted area was estimated by assuming that the wetted width calculated for each transect represents a specific length of the channel (Table 1). The transect lengths were determined using the longitudinal profiles, which were partitioned into two habitat types (shallow and deep). For the partitioning, the water depth along the longitudinal profile was compared to the average water depth of the channel. If the water depth of a section was less than the average depth of the longitudinal profile, the section was classified as shallow habitat. If the water depth of a section was greater than the average depth of the longitudinal profile, the section was classified as deep habitat. The proportion of the longitudinal profile assigned to deep or shallow habitat was then calculated by dividing the overall length of shallow/deep sections by the length of the longitudinal bed profile.

[8] The survey transects included dry substrate up to the level of bankfull.

A model was used to calculate weighted usable width (WUW), a measure of habitat quantity, by applying habitat suitability indices (Figure 1) to the transect water depth and velocity data. WUW was calculated as:

$$WUW_{dv} = \Sigma_i^n (W_i * D_i * V_i)$$

where $W_i$ is the width of cell[9] $i$ on the transect, $D_i$ is the suitability of depth at cell $i$, and $V_i$ is the suitability of velocity at cell $i$. WUW was calculated for Bull Trout (EMA 1994), Mountain Whitefish (Bovee 1978), Rainbow Trout (Ptolemy 2001, using steelhead criteria as a proxy), Arctic Grayling (Hubert *et al.* 1985), and Walleye (Mainstream 2006). Weighted usable area (WUA) for the flow conditions represented by each survey (i.e., August and October 2021) was calculated by multiplying each transect by the associated channel length (Table 1). The amount of usable habitat (usability) was calculated for each area and species/life stage by dividing the WUA by the total wetted area for a channel.

To analyse the underwater substrate, GoPro videos were subdivided into a minimum of 20 still photographs equally spaced across the length of the transect. Substrate was delineated into percent composition of fines, gravel, and cobbles by viewing the still image at each interval. Observations of aquatic and terrestrial vegetation as well as LWD and other habitat features were noted.

[9] Note: The area between two transect depth/velocity measurements is referred to as a cell. The depth and velocity within that cell is used for calculating habitat suitability and is the average of the depth and velocity measured on either side of the cell.

**Table 1. Channel transect locations, habitat type, and channel length (determined from habitat type, used to calculate wetted area and weighted usable area).**

| Channel | Habitat Type | Transect | Channel Length (m) | |
|---|---|---|---|---|
| | | | Aug-21 | Oct-21 |
| Backwater Channel | A, shallow | GMB02 | 617 | 617 |
| | B, deep | GMB03 | 119 | 119 |
| | B, deep | GMB05 | 119 | 119 |
| | | **Total** | **856** | **856** |
| East Side Channel [1] | A, shallow | GME01 | 222 | 171 |
| | B, deep | GME02 | 285 | 285 |
| | A, shallow | GME03 | 222 | 171 |
| | | **Total** | **730** | **628** |
| Main Channel Bar [2] | A, shallow | GMP02 | 227 | 227 |
| | A, shallow | GMP04 | 227 | 227 |
| | B, deep | - | 169 | 169 |
| | | **Total** | **624** | **624** |
| South Side Channel Spur Extension [3] | A, shallow | GMS02 | 225 | |
| | B, deep | GMS03 | 198 | |
| | B, deep | GMS04 | 198 | |
| | | **Total** | **621** | |
| West Side Channel [3] | B, deep | GMW01 | 267 | |
| | B, deep | GMW02 | 267 | |
| | A, shallow | GMW05 | 203 | |
| | A, shallow | GMW08 | 203 | |
| | | **Total** | **940** | |

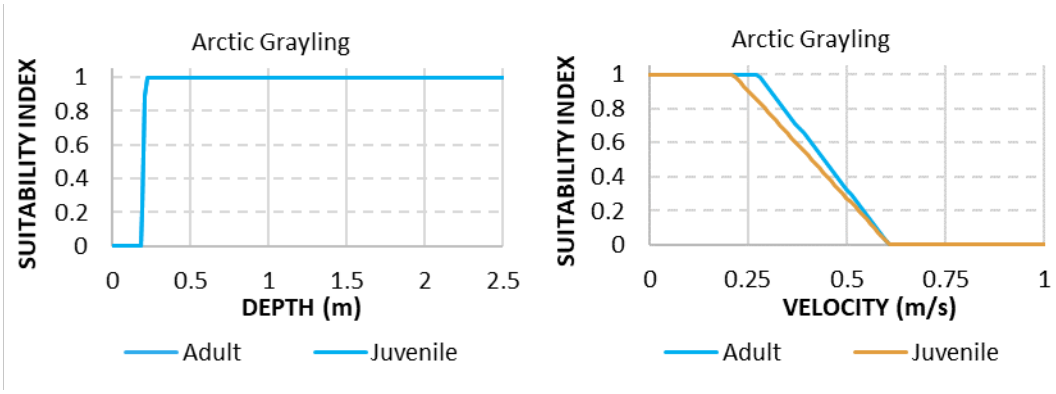
[1] Longitudinal bed profile was cut short in October due to low water

[2] Both transects surveyed at Main Channel Bar were classified as shallow

[3] Logitudinal bed profile not completed on October survey due to equipment failure.

**Figure 1.** Habitat suitability indices used to calculate weighted usable width (WUW) and weighted usable area (WUA) for a) Arctic Grayling, b) Mountain Whitefish, c) Rainbow Trout, and d) Walleye.

**a) Arctic Grayling**




**b) Mountain Whitefish**

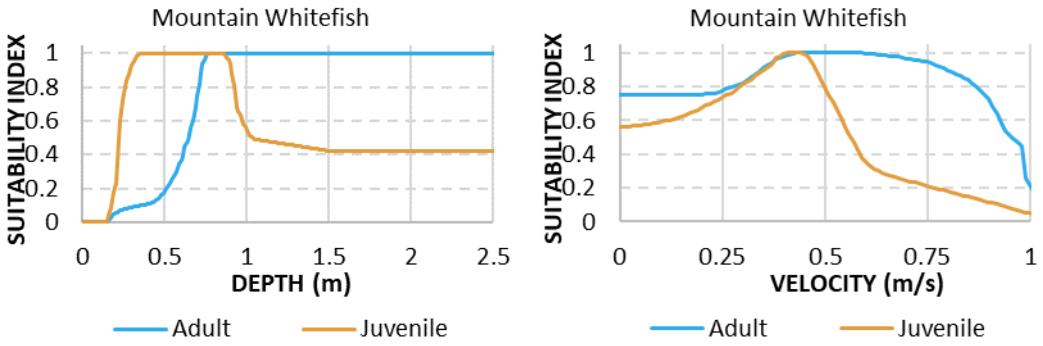
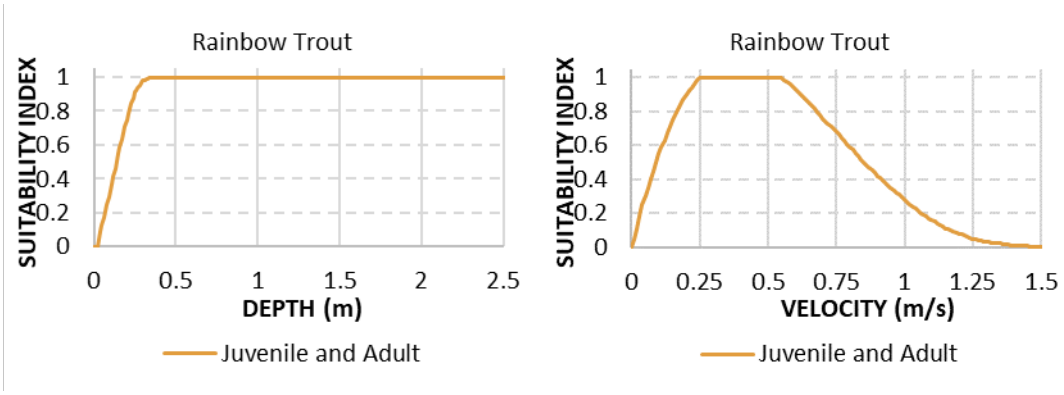
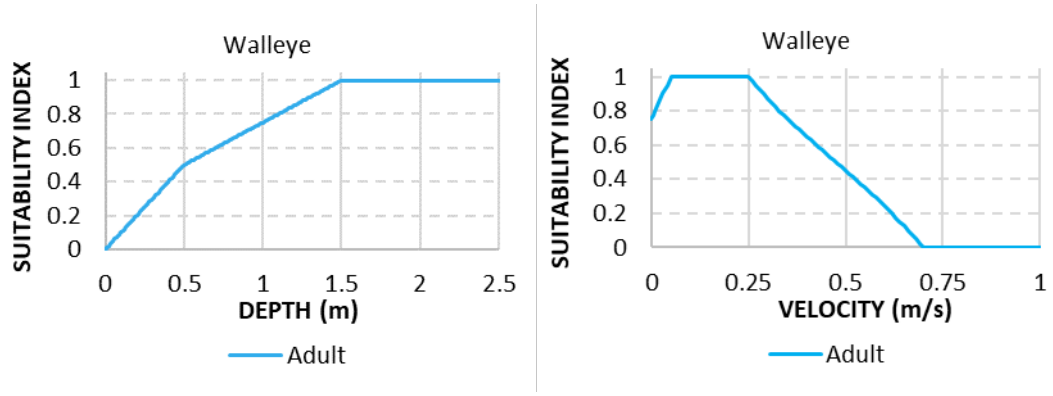


**Figure 1. Continued.**

**c) Rainbow Trout**




**d) Walleye**




## 3.2. Fish Sampling

Sampling was conducted using multiple methods to effectively sample different habitat types; methods were consistent with historical sampling (Mainstream 2010, 2011, 2013) and included small-fish boat electroshocking, large-fish boat electroshocking, backpack electrofishing, minnow trapping, hoop trapping, gill netting, and beach seining, as described below. Trips were timed to occur between August and October, with the aim of conducting sampling during common flows (i.e., between 500 and 1,500 $m^3/s$).

### 3.2.1. Small-Fish Boat Electroshocking

Fourteen small-fish boat electroshocking sites were sampled within the South Side Channel Spur Extension, West Side Channel, East Side Channel, Backwater Channel, and South Side Channel (Map 3). To allow the crew to effectively manoeuvre the boat, sites were located in habitats where water depths were greater than 0.4 m and wetted widths were greater than 6 m. Site locations were selected in 2020 and replicated in 2021.

Small-fish boat electroshocking was used to sample fish in deeper areas of stream margins during periods of higher flows. Sampling was conducted using a 14' inflatable raft that was powered by hand rowing, or by an 18' aluminium hulled Gator jet boat in October. Both the raft and the Gator jet boat were equipped with a generator powered electroshocker (Generator Pulser 2.5). The electroshocking unit consisted of a cathode array curtain placed on the bow and two anode pole arrays extending approximately 1.5 m in front of the bow angled between 20° and 40° off either side of the boat. Electroshocker settings and protocols followed industry standards and were consistent with those used by Golder Associates Ltd. (Golder) and Ecofish while conducting the FAHMFP Site C Reservoir Tributaries Fish Population Indexing Survey from 2016 to 2019 (Mon-1b, Task 2c; Golder 2017; Table 2).

Sampling was conducted while travelling in a downstream direction. The boat operator used the oars or the jet engine to manoeuvre the boat to follow the shoreline while avoiding instream hazards such as large woody debris. One crew member was positioned at the bow of the boat to net stunned fish and transfer them to a water-filled holding tank. The netter attempted to capture all stunned fish and noted the approximate number and species of all missed fish. Captured fish were processed in accordance with methods described in Section 3.2.7. Once processed, the recovered fish were returned to the stream in approximately the same location where they were captured.

**Table 2. Habitat variables and boat electroshocker settings recorded at each small-fish boat electroshocking site during each sample session in 2021.**

| Variable | Description |
|---|---|
| **Date** | The date the site was sampled |
| **Time** | The time the site was sampled |
| **Water Temp** | Water temperature at the time of sampling (to the nearest 0.1°C) |
| **Conductivity** | Water conductivity at the time of sampling (to the nearest 10 µS/cm) |
| **Secchi Bar Depth** | The Secchi Bar depth recorded at the time of sampling (to the nearest 0.1 m) |
| **Cloud Cover** | A categorical ranking of cloud cover (Clear = 0-10% cloud cover; Partly Cloudy = 10-50% cloud cover; Mostly Cloudy = 50-90% cloud cover; Overcast = 90-100% cloud |
| **Boat Model** | The model of boat used during sampling |
| **Range** | The range of voltage used during sampling (high or low) |
| **Percent** | The estimated duty cycle (as a percentage) used during sampling |
| **Amperes** | The average amperes used during sampling |
| **Mode** | The mode (AC or DC) and frequency (in Hz) of current used during sampling |
| **Length Sampled** | The length of shoreline sampled (to the nearest 1 m) |
| **Time Sampled** | The duration of electroshocker operation (to the nearest 1 second) |
| **Mean Depth** | The mean water depth sampled (to the nearest 0.1 m) |
| **Maximum Depth** | The maximum water depth sampled (to the nearest 0.1 m) |

### 3.2.2. Large-Fish Boat Electroshocking

Large-fish boat electroshocking was carried out at three sites between August 17 and September 14. The three sites (OEM-USC, OEM-DSC and OEM-MS; Map 3) were sampled on four occasions using an 18' Smith-Root Heavy Duty Series electroshocking jet-boat equipped with a high-power Generator Powered Pulsator (GPP 5.0) electroshocker (Smith-Root Inc.; Golder 2021). Sampling was conducted in habitats greater than approximately 1 m deep and approximately 1-3 m off the bank. The electroshocking procedure consisted of manoeuvring the boat downstream along the shoreline of each sample site. Two crew members, positioned at the bow of each boat, netted stunned fish, while the third crew member operated the boat and electrofishing unit. All captured fish were immediately placed into 175 L onboard live wells equipped with freshwater circulation (Golder 2021). Effort (seconds of electroshocker operation) and length of shoreline sampled (m) were recorded for each sample (Golder 2021).

### 3.2.3. Backpack Electrofishing

Field crews sampled eight backpack electrofishing sites (three newly established) during Year 2 (Map 3). Sites were selected to ensure adequate spatial representation, with a minimum of one site established in each side channel, where appropriate habitat existed. Backpack electrofishing was primarily used during low flow periods (September and October) in wadable areas where the water was too shallow for boat electroshocking (<0.5 m depth).

Backpack electrofishing was completed using a Smith-Root Inc. (12-B or LR-24) backpack electrofisher using techniques consistent with those detailed in Mon-1b, Task 2c (Golder 2018). Sites were accessed either by boat or hiking on five dates between August 5 and October 26, 2021. A single pass approximately 100-m-long was conducted at each site. The electrofishing unit operator waded upstream along the side-channel margin, while a single netter attempted to capture all stunned fish.

Stunned fish were netted and transferred to a holding tank until they were processed following the methods described in Section 3.2.7. After recovery from processing, fish were returned to the stream in the approximate location of capture.

### 3.2.4. Minnow Trapping

Eighteen minnow trap sites were sampled within the West Side Channel, East Side Channel, and South Side Channel Spur Extension (Map 3). Minnow trap sites were accessed via boat or on foot during multiple sampling dates in August and October 2021. Minnow traps had standard dimensions of 40 cm in length, 20 cm in diameter, with ~2 cm openings and 3- or 6-mm mesh size. Minnow traps were deployed in moderately deep (0.5 to 1.5 m) areas in habitats with LWD that could not be effectively sampled using other techniques such as electrofishing.

If conditions were more suitable for hoop traps (i.e., deeper water requiring midstream anchor points), then hoop traps were used instead of minnow traps. Hoop traps were deployed at three sites in each of the West Side Channel and the East Side Channel (Map 3). Hoop traps were 1.5-m-long with a 0.35 m diameter opening and a mesh size of approximately 6 mm. Both minnow traps and hoop traps

were baited with dry cat food and deployed overnight, with a target soak time of ~24 hours. All fish captured during trapping were processed in accordance with the methods described in Section 3.2.7.

#### 3.2.5. Gill Netting

Gill net surveys were conducted at three sites. The sites were located adjacent to the outlet of the East Channel, in the South Side Channel, and in the Backwater Channel (Map 3). Gill net sites were accessed via boat in September and October 2021. Submerged small mesh nylon gill nets were set in deep-water areas (1 to 3 m water depth). The gill net specifications and set methods were consistent with those used in past studies (e.g., Mainstream 2011). Net panel dimensions were 15.2 m by 2.4 m, with stretched mesh sizes of 1.9 cm, 3.8 cm, 6.4 cm, and 8.9 cm. The gill nets were set and checked at least every two hours while crews were on site conducting other surveys. Unless crews were working in the immediate area, gill nets were not deployed, and nets were never left to fish overnight. Captured fish were transferred to a holding tank and processed in accordance with the methods described in Section 3.2.7.

#### 3.2.6. Beach Seining

Beach seining was conducted at five sites in September 2021 by Triton (LeRuez, pers. comm. 2021) and at one site by Golder in October 2021 (Map 3). Sites with low stream velocity and moderate depths that were not effectively sampled by backpack electrofishing were selected as beach seining sites (Mainstream 2011). The sites selected were within the East Side Channel and in the South and South Spur Extension channels. Three hauls were completed at each site on each sampling date, with each haul covering a target area of approximately 100 $m^2$. Captured fish were transferred to a holding tank and processed in accordance with the methods described in Section 3.2.7.

#### 3.2.7. Data Collection and Fish Processing

Information collected and recorded at each site during each fish sample session included the date and time, weather, geodetic location, photographs, sample method settings and specifications, and sampling effort (i.e., electrofishing seconds, minnow trap soak time, length, width, and depth sampled). All captured fish were identified to species, measured for fork length, and weighed. A subset of select species (Bull Trout, Mountain Whitefish, Rainbow Trout, Walleye, suckers (*Catostomus* sp.), Northern Pike (*Esox lucius*) and Kokanee (*O. nerka*) were sampled for ageing structures (fin rays for Bull Trout and Walleye, scales for other species).

All fish captured in good health and greater than 200 mm fork length (FL) were scanned for HDX PIT tags, and if none were found, were implanted with a PIT tag using methods consistent with other Site C FAHMFP studies (e.g., Golder 2021). PIT tag data will be provided to other components of the Site C FAHMFP as necessary, most notably the Peace River Fish Composition and Abundance Survey (Mon-2, Task 2b).

Biological samples collected included tissue samples for genetic analyses, and hard structure samples (i.e., fin rays or otoliths) for ageing and potential microchemistry analysis. Tissue samples were collected from all Bull Trout and Rainbow Trout captured during OEM. When requested, tissue samples were collected from 20 individuals per species of small-bodied fish (e.g., Redside Shiner

(*Richardsonius balteatus*), Longnose Dace, Prickly Sculpin (*Cottus asper*), and Slimy Sculpin, which are infrequently captured during the Peace River Indexing Survey (Mon-1b, Task 2c; Golder 2018 - 2021). All samples were provided to Golder and will be used to further characterize Peace River fish populations for other components of the Site C FAHMFP. The analysis and interpretation of these samples are not discussed in this report.

## 3.3. Fish Community Data Analysis

Catch, effort, species, and fish condition were used to quantify fish use of Side Channel Site 108R. Data were collected by Ecofish, Golder, and Triton, and each respective company carried out quality assurance on the data after they were collected. Golder and Triton forwarded their respective datasets to Ecofish (Ford, pers. comm. 2021; LeRuez, pers. comm. 2021). Once all data were received, they were compiled and secured into a single database. Once this report is finalized, all data will be uploaded to BC Hydro.

To support assessment of the effectiveness the individual offset channels, as well as Side Channel Site 108R as a whole, the offset channels (Map 3) were assessed individually and cumulatively. The primary metric reported on is Catch Per Unit Effort (CPUE; measured as fish/km-hour), which provides a more standardized measure of fish abundance than absolute catch.

### 3.3.1. Catch and Effort Tables

Data were summarized for each sampling method (small-fish boat electroshocking, large-fish boat electroshocking, backpack electrofishing, gill netting, minnow/hoop trapping, and beach seining). Gillnetting, trapping, and beach seining results are available in Appendix D. Physical habitat variables that may affect catch are presented along with effort for each method; descriptions of the habitat variables measured at each site are provided in Table 2. Catch results for indicator species by channel are presented in Section 4.2. A breakdown of catch results for all species by site and size class are presented in Appendix D. Size classes are consistent with past reporting (e.g., Golder 2020).

### 3.3.2. Length-Weight Relationship and Condition Factor

Length-weight relationship (LWR) and relative condition factor ($K_r$) are two key parameters used in fisheries research and were calculated as indicators of general fish health. The LWR is the relationship between length and weight for a given species and can be used to estimate patterns of growth within populations. Fulton's condition factor ($K$) was calculated for all captured fish with measurements for length and weight using the following equation:

$$K = \left(\frac{W}{L^3}\right) 100{,}000$$

where $W$ is the weight in grams, $L$ is the fork length in millimeters, and $100{,}000$ is a scaling constant (Blackwell *et al.* 2000).

### 3.3.3. Length Frequency Histograms

Histograms were generated for all species, though in some cases insufficient captures precluded the drawing of conclusions about population size structure.

#### 3.3.4. Diversity Profiles

Diversity profiles plot the relationship between diversity (expressed as effective numbers of species) and *q* (a parameter that determines the sensitivity of the index to rare species) (Leinster and Cobbold 2012). When *q* is low, the diversity profile is weighted towards the number of species detected, even if only one individual from a particular species is detected. When *q* is high, the diversity profile is weighted towards abundance, and only abundant species are counted. Diversity profiles therefore provide an effective way to compare diversity between years of study, based on whether rarity or evenness in abundance is prioritized, rather than single estimates like species richness.

To generate diversity profiles, fish abundance data from all surveys and sites were combined. All recorded fish species were included except where identification was not to the species level. Suckers spp. and 'small-bodied fish' (shiners, sculpins, cyprinids, etc.) were each grouped together with a similarity of 1, while all other species were given a similarity of 0, as outlined in Ma *et al.* (2015). We used the diversity function in the package vegan (Oksanen *et al.* 2020) in the program R (R Core Team 2020) to calculate the effective numbers of species for values of *q*. A low value of *q* (i.e., 0) is a count of the number of fish species captured (with sucker spp. grouped and dace, shiners and sculpin grouped). A *q* value of 5 indicates a heavy weight on evenness of number of individuals; when *q* is high, species for which few individuals were captured are dropped from the Effective Number of Species. This method of calculation is consistent with the method used to assess diversity in offset monitoring at Upper Site 109L (Golder 2020).

## 4. RESULTS

### 4.1. Physical Habitat Sampling

#### 4.1.1. Channel Hydraulics

Characteristics of channel hydraulics were calculated from the ADCP and GPS measurements. Width, depth, velocity, and flow at each transect, along with discharge in the Peace River[10], are summarized in Table 3. For photos of transect measurements, and representative photos of channels, consult Appendix B. Plots of velocity and bed profiles are presented in Figure 2 (a-e) and in Appendix E. Since construction of Side Channel Site 108R, multiple high flow events near, or in excess, of the predicted channel forming flow (i.e., 2500 $m^3/s$; NHC 2016) have occurred. A short-term high flow event occurred on July 4, 2020, when Peace River discharge exceeded 2,800 $m^3/s$ for multiple hours. Another period with discharge greater than 2,400 $m^3/s$ occurred from August 8 to August 19, 2020. Smaller peaks of 2,100 and 2,000 $m^3/s$ occurred on February 15, 2021, and July 3, 2021.

During the August 4 – 6, 2021 sampling, flows in the Peace River were approximately 743 $m^3/s$, while they were higher at approximately 865 – 1,100 $m^3/s$ on October 1 – 2, 2021. For reference, in August

[10] As measured at the Peace River above Pine River Water Survey Canada hydrometric gauge (WSC gauge 07FA004).

and September 2020 surveys were conducted at Peace River flows around 2,150 $m^3/s$ and 940 $m^3/s$, respectively. To put the 2021 flows into context, the cumulative distribution function (CDF) of Peace River flows was calculated using daily average discharge data (2013 – 2021) from the WSC gauge at the Peace River Above Pine River (07FA004; ECWO 2020). The CDF is plotted in Figure 3 along with the average Peace River flows during the August and October surveys. The CDF indicates the 25$^{th}$ percentile (907 $cm^3/s$), median (1,202 $cm^3/s$), 75$^{th}$ percentile (1,498 $cm^3/s$), and 90$^{th}$ percentile flows (1,765 $cm^3/s$). Flows during the August (743 $cm^3/s$) and October (865 – 1100 $cm^3/s$) surveys correspond to the 15$^{th}$ percentile and 22$^{nd}$ to 41$^{st}$ percentile, respectively. The average daily flows for the Peace River from 2013 to 2021 are shown in Figure 4.

Between the August and October surveys the Peace River flows increased. This caused an increase in discharge for the West Side channel, East Side channel, and Main Channel Bar. In the Backwater Channel and South Side Channel Spur Extension, only stage increased because each of these channels form due to backwatering and are primarily stillwater. In correspondence with the flow and stage increases, the wetted widths of the offset channels also increased between August and October. Depth and velocity of each transect generally increased between August and October as well, but to a smaller degree than the channel width. The sample plots of velocity and bed profiles (Figure 2) reflect the trends summarized in Table 3, i.e., increase in velocity, depth, and width with increasing Peace River flows between August and October.

**Table 3. Summary of hydraulic parameters for transects at Peace River Side Channel Site 108R channels, generated from data collected over two periods in 2021: August 4 – 6 and October 1 – 2.**

| Channel | Date | Transect | Transect Discharge ($m^3/s$) | Peace River Discharge | Wetted Width (m) | Average Depth (m) | Average Velocity (m/s) | Maximum Depth (m) |
|---|---|---|---|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 0.0 | 743.0 | 27.8 | 0.7 | 0.1 | 0.9 |
| | | GMB03 | 0.0 | 743.0 | 27.6 | 1.2 | 0.0 | 1.5 |
| | | GMB05 | 0.0 | 743.0 | 29.0 | 1.2 | 0.0 | 1.6 |
| | **04-Aug-21 Average** | | **0.0** | **743.0** | **28.1** | **1.0** | **0.0** | **1.4** |
| | 2-Oct-21 | GMB02 | 0.0 | 950.0 | 30.1 | 0.9 | 0.0 | 1.3 |
| | | GMB03 | 0.0 | 943.0 | 28.9 | 1.4 | 0.0 | 1.9 |
| | | GMB05 | 0.0 | 934.0 | 30.9 | 1.3 | 0.0 | 1.9 |
| | **02-Oct-21 Average** | | **0.0** | **942.3** | **30.0** | **1.2** | **0.0** | **1.7** |
| East Side Channel | 6-Aug-21 | GME01 | 1.9 | 743.0 | 12.1 | 0.2 | 0.7 | 0.4 |
| | | GME02 | 1.9 | 743.0 | 13.9 | 0.9 | 0.2 | 1.3 |
| | | GME03 | 1.9 | 743.0 | 12.4 | 0.7 | 0.2 | 1.0 |
| | **06-Aug-21 Average** | | **1.9** | **743.0** | **12.8** | **0.6** | **0.4** | **0.9** |
| | 1-Oct-21 | GME01[1] | - | - | - | - | - | - |
| | | GME02 | 4.3 | 1100.0 | 15.8 | 1.1 | 0.3 | 1.6 |
| | | GME03 | 4.3 | 903.0 | 15.2 | 0.9 | 0.3 | 1.3 |
| | **01-Oct-21 Average** | | **4.3** | **1001.5** | **15.5** | **1.0** | **0.3** | **1.5** |
| Main Channel Bar[2] | 6-Aug-21 | GMP02 | 743.0 | 743.0 | 73.5 | 1.9 | 1.2 | 2.6 |
| | | GMP04 | 743.0 | 743.0 | 74.6 | 1.8 | 0.9 | 2.6 |
| | **06-Aug-21 Average** | | **743.0** | **743.0** | **74.1** | **1.8** | **1.1** | **2.6** |
| | 1-Oct-21 | GMP02 | 865.0 | 865.0 | 79.2 | 2.1 | 1.4 | 3.0 |
| | | GMP04 | 900.0 | 900.0 | 81.6 | 2.0 | 1.0 | 3.1 |
| | **01-Oct-21 Average** | | **882.5** | **882.5** | **80.4** | **2.1** | **1.2** | **3.1** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 0.2 | 743.0 | 13.7 | 0.8 | 0.0 | 1.2 |
| | | GMS03 | 0.2 | 743.0 | 15.2 | 1.0 | 0.0 | 1.5 |
| | | GMS04 | 0.2 | 743.0 | 14.1 | 1.0 | 0.0 | 1.3 |
| | **05-Aug-21 Average** | | **0.2** | **743.0** | **14.3** | **0.9** | **0.0** | **1.4** |
| | 2-Oct-21 | GMS02 | 0.6 | 883.0 | 13.0 | 1.0 | 0.1 | 1.4 |
| | | GMS03 | 0.6 | 893.0 | 16.7 | 1.2 | 0.0 | 1.8 |
| | | GMS04 | 0.6 | 916.0 | 16.5 | 1.1 | 0.0 | 1.6 |
| | **02-Oct-21 Average** | | **0.6** | **897.3** | **15.4** | **1.1** | **0.1** | **1.6** |
| West Side Channel | 6-Aug-21 | GMW01 | 14.5 | 743.0 | 27.0 | 1.5 | 0.4 | 1.9 |
| | | GMW02 | 14.5 | 743.0 | 18.5 | 1.3 | 0.6 | 1.9 |
| | | GMW05 | 14.5 | 743.0 | 24.8 | 1.0 | 0.6 | 1.4 |
| | | GMW08 | 14.5 | 743.0 | 30.2 | 0.4 | 1.2 | 0.6 |
| | **06-Aug-21 Average** | | **14.5** | **743.0** | **25.1** | **1.0** | **0.7** | **1.4** |
| | Oct-21 | GMW01[3] | - | - | - | - | - | - |
| | | GMW02[3] | - | - | - | - | - | - |
| | | GMW05[3] | - | - | - | - | - | - |
| | | GMW08[3] | - | - | - | - | - | - |
| | **Oct-21 Average** | | **-** | **-** | **-** | **-** | **-** | **-** |

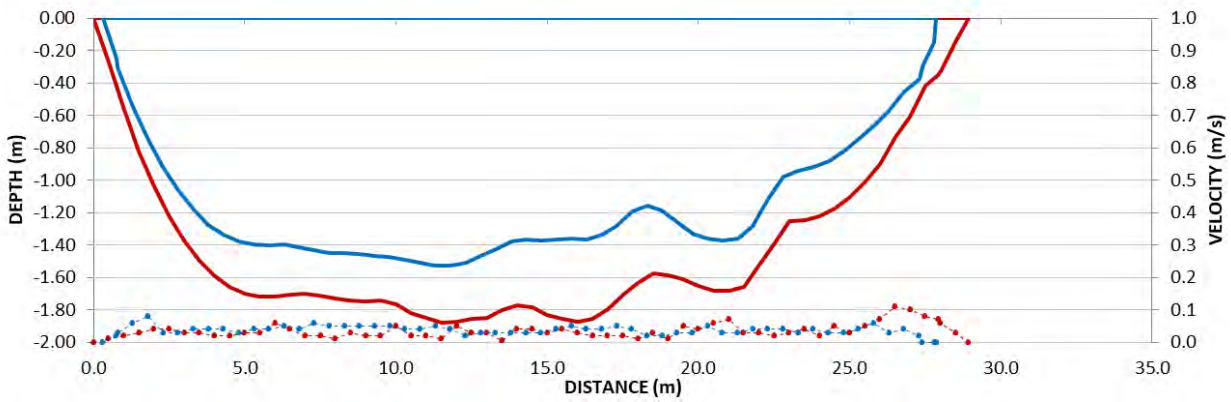
[1] Transect too shallow to measure

[2] Main Channel Bar values correspond to partial measurement in Peace River mainstem

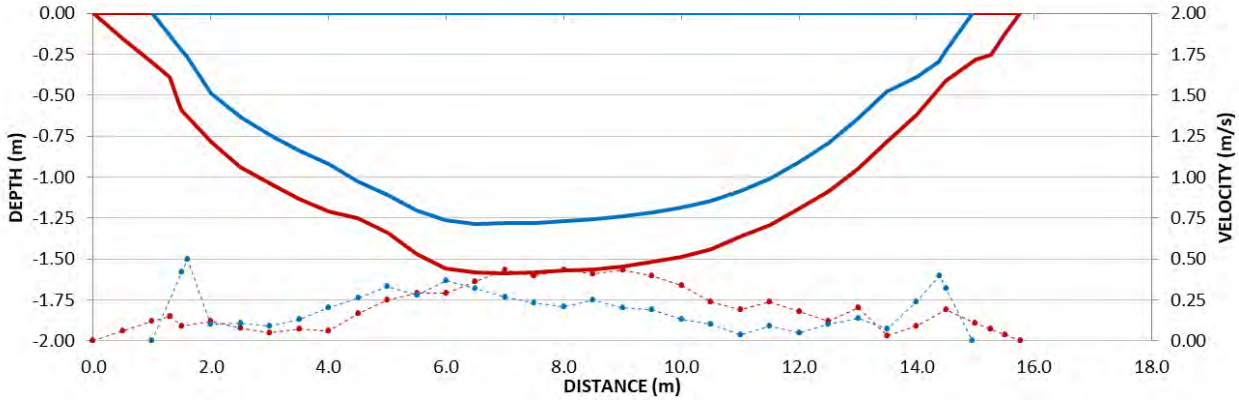
[3] No survey of West Side Channel in October 2021 due to time constraints

**Figure 2.** Water depth (solid lines) and velocity profiles (dotted lines) from August (blue) and October (red) measurements of transects in the a) Backwater Channel, b) East Side Channel, c) Main Channel Bar, d) South Side Channel Spur Extension, and e) West Side Channel.

**a) GMB03**




**b) GME02**




**c) GMP04**

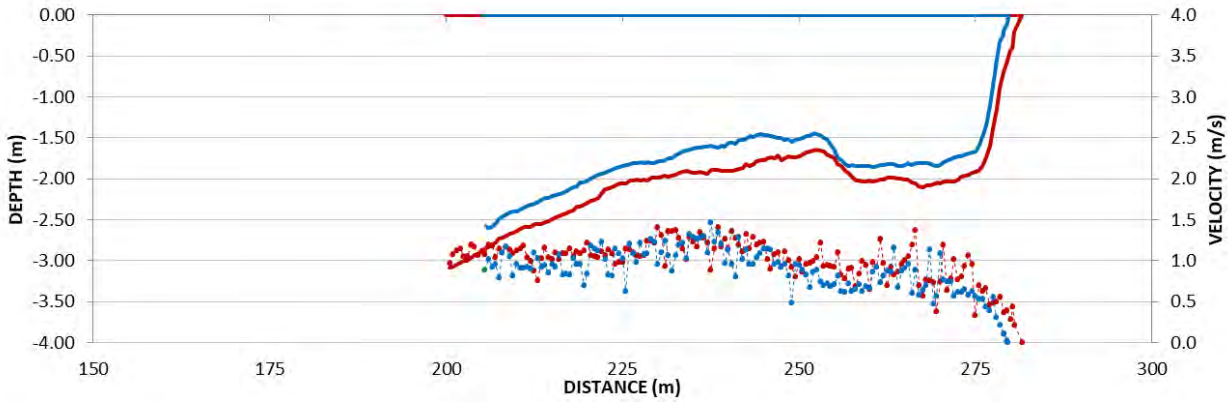
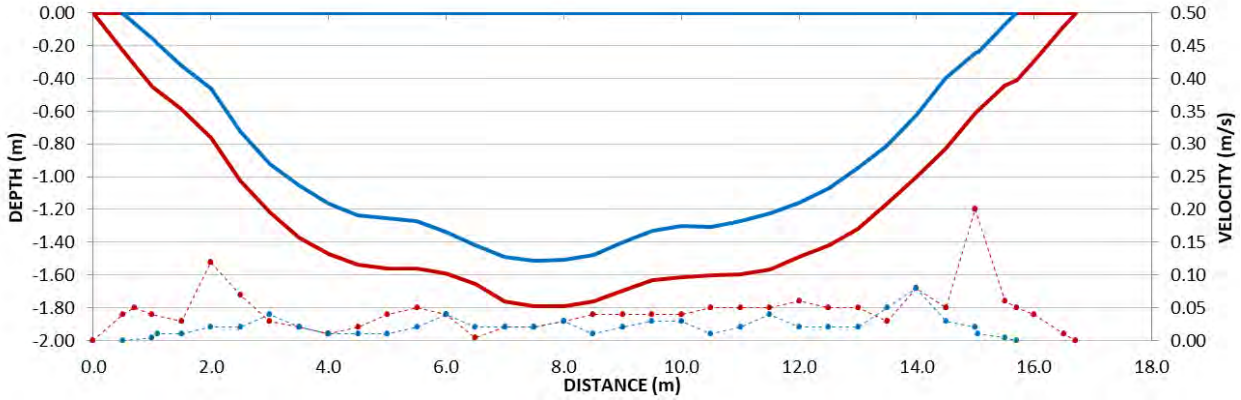


**Figure 2. Continued.**

**d) GMS03**




**e) GMW01**

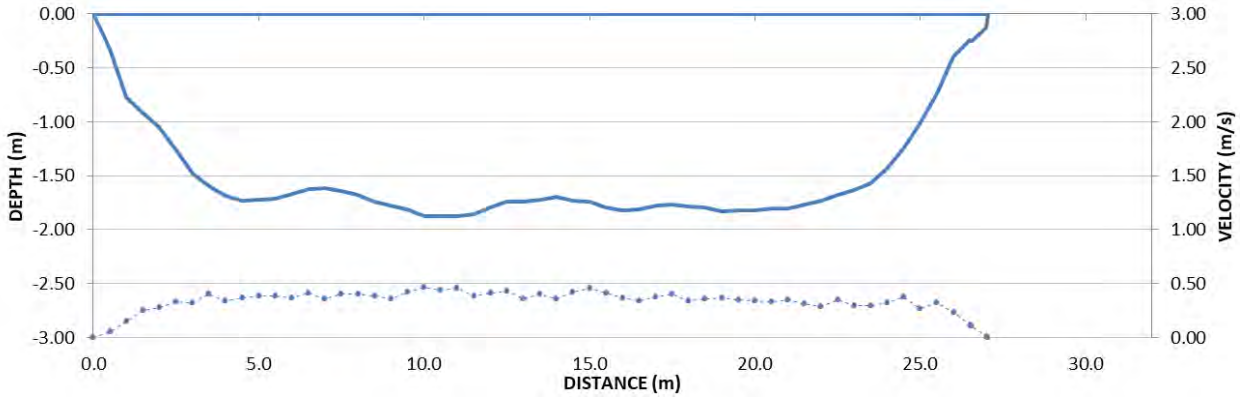


**Figure 3.** **Cumulative distribution function for Peace River flows, based on daily discharge data from 2013 to 2021 as measured at the Peace River above Pine River WSC gauge (07FA004), with reference to August (blue) and October (red) 2021 surveys. The points for the October 2021 survey represent the highest and lowest discharges observed during the survey.**

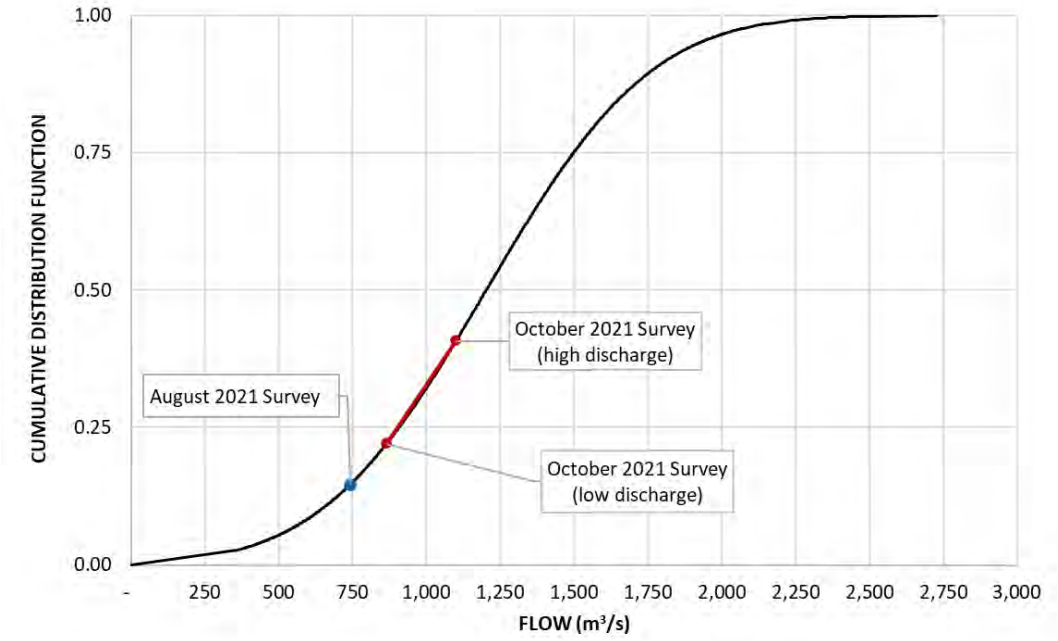
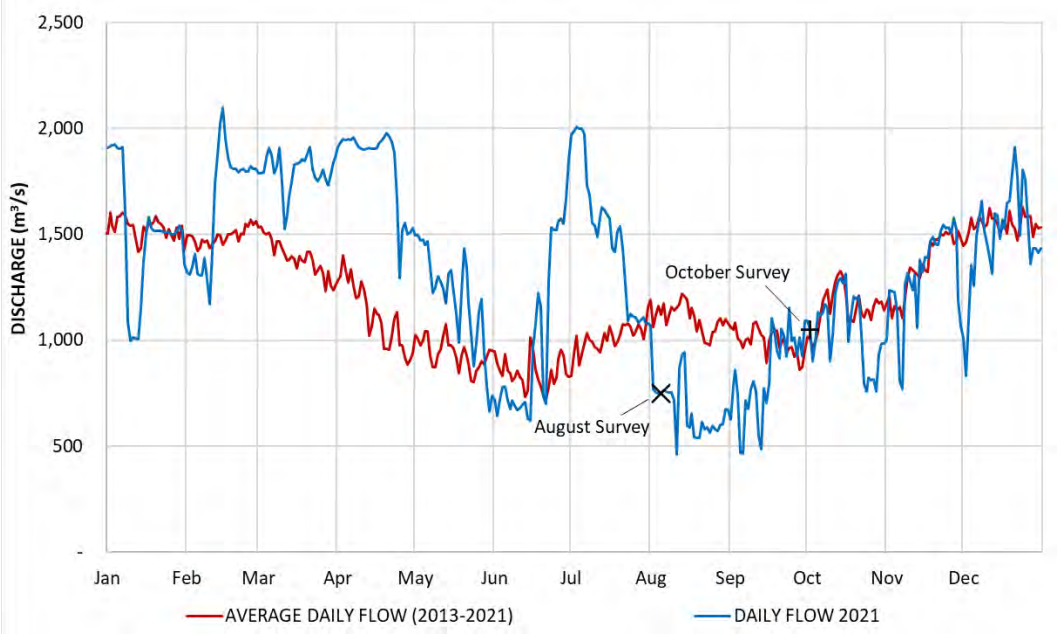



**Figure 4.** **Average daily discharge for the Peace River from 2013 to 2021, as measured at the Peace River above Pine River WSC gauge (07FA004).**



#### 4.1.2. Longitudinal Bed Profiles

The longitudinal bed profiles for each channel are plotted in Figure 5 to Figure 9 (2020 and 2021), along with NHC (2019) design elevations, NHC as-built surveys (NHC 2020), the transect locations, and the water surface elevations. Note that profiles for the West Side Channel and the South Side Channel Spur Extension were not collected during the October 2021 trip due to equipment malfunctions (as detailed in Section 3.1.2). Bed profiles are not compared to the design (NHC 2016) as variances and deficiencies were noted in NHC's construction completion document (NHC 2020). The design elevations are included as a reference. In general, the profiles for the Backwater Channel and the South Side Channel Spur Extension match well with the as-built survey, while the East Side Channel, West Side Channel, and Main Channel exhibit larger discrepancies between the current bed profile and the profile documented in the NHC as-built surveys, as discussed below. While portions of the channels showed scouring, overall, a net aggradation of bed material was observed along the longitudinal profiles of all channels compared to the as-built surveys.

##### 4.1.2.1. Backwater Channel

In the Backwater Channel (Figure 5), changes in the longitudinal profiles between 2020 and 2021 were insignificant. Any discrepancies between the bed elevations were likely a result of misalignment of longitudinal tracks during the survey. Overall, the longitudinal profile agreed with the as-built survey (NHC 2020). Field observations showed that a sand deposit was present at the downstream extent, causing an increase in bed elevation of up to 0.5 m compared to the NHC as-built survey.

##### 4.1.2.1. South Side Channel Spur Extension

The shape of the bed profile in the South Side Channel Spur Extension from 2020 and 2021 (Figure 6) matched well with the as-built survey (NHC 2020), suggesting that the change in bedform was minimal between the surveys. Most differences between the records were likely due to misalignment of longitudinal tracks. Habitat functions are likely as intended.

##### 4.1.2.2. East Side Channel

Substantial changes have occurred in the longitudinal bed profile of the East Channel (Figure 7) since the as-built survey (NHC 2020). The most notable discrepancies between the channel the as-built survey (NHC 2020) and the 2020 and 2021 profiles were found at the inlet, where, in 2020, the surveyed bed elevation was up to 1.0 m higher than during the as-built. By the time of the 2021 survey, the elevated bed appeared to persist for a longer portion of the channel. The elevated bed in the upstream section causes an increase in water surface slope. Further downstream, around transect GME2, the water surface slope flattens out again. These changes may have a negative effect on the intended habitat function, by decreasing connectivity with the mainstem of the Peace River, and by partial dewatering during low flow events.

Of note, the upstream 170 m section of the East Side Channel was not surveyed during the October 2021 survey, because the water level was too low for the equipment to function properly.

However, the field crew noted that this section of the channel was wetted during the time of the survey, thus still providing some habitat function.

The pattern of shallow and deep sections in the channel bed profile along the East Channel was also found to have shifted longitudinally relative to the as-built elevations (NHC 2020), but this pattern was also consistent between the 2020 and 2021 surveys. Sediment transport reduced the depth of deep sections, relative to the crest of shallow sections.

#### 4.1.2.3. West Side Channel

The bed profile of the West Side Channel in August 2021 has changed since the May 2020 as-built survey (NHC 2020; Figure 8). These changes could influence the intended habitat functions based on shifts of habitat suitability parameters. The changes were caused by sediment redistribution processes. Also, differences between the August 2020 and August 2021 bed profiles suggest continued bedform changes between the two survey dates.

At the upstream end of the West Side Channel, all profiles (as-built, August 2020, and August 2021) agree well up to transect GMW2. Between GMW2 and GMW3, the elevations of deep sections in the 2021 survey agree well with the as-built profile. However, the aggraded material in shallow sections, caused increased elevations which are approximately 0.3 to 0.4 m higher than elevations of shallow sections in the as-built survey. Between transects GMW3 and GMW4, the elevation differences between shallow and deep sections increased, suggesting aggradation of shallow and scouring of deep sections. The residual depth of deep sections remained greater compared to the as-built, indicating that the intended hydraulic variability was still present. Between the as-built and 2021 surveys, the longitudinal position of bedform features shifted upstream by 4 to 10 m. At transect GMW4, a shallow section has formed which marked the highest point in the bed profile both in August 2020 and August 2021. This shallow section was less pronounced during the May 2020 as-built survey and increased in length from approximately 100 m in August 2020 to approximately 150 m in August 2021.

#### 4.1.2.4. Main Channel Bar

In the Main Channel Bar, changes have occurred in upstream depressions 1 to 5 (Figure 9) since the as-built survey (NHC 2020). These changes are largely due to sediment accumulation in the upstream depressions, causing increases in bed elevation of approximately 1.0 to 2.0 m (for reference the design depth for the depression was 1.5 m to 2.0 m). Misalignment of longitudinal tracks also caused discrepancies between the bed profiles, although to a smaller degree. For instance, the October 2021 profile tended to be elevated by 0.2 to 0.5 m above the August 2021 profile; this is because the October 2021 track was closer to the bank, where the water depth is naturally shallower. However, when the 2021 profile tracks are laid over a surface model of the channel design with depressions, the tracks clearly cross all depressions. Therefore, the change in longitudinal profiles for depressions 1 to 5 can be attributed to bedform alterations.

Few changes were observed for depressions 6 to 11. Here, the longitudinal profiles of 2021 agree well with the 2020 profiles, and with the as-built survey (NHC 2020). The hydraulic complexity and

associated habitat function that was intended by the depressions appears to be achieved for depressions 6 to 11, based on the velocity distribution shown in Figure 10. For depressions 1 to 5, however, the hydraulic complexity is reduced, which may affect the habitat function if the values of habitat suitability parameters are altered. A more thorough assessment of functionality of these depressions will be completed during Year 3.

**Figure 5.** **Plots of Backwater Channel longitudinal bed profiles and water surface elevations for 2020 (top) and 2021 (bottom) surveys. Also shown are the Backwater Channel bed profile in the as-built survey (May 2020) and NHC bed design, and location of transects.**

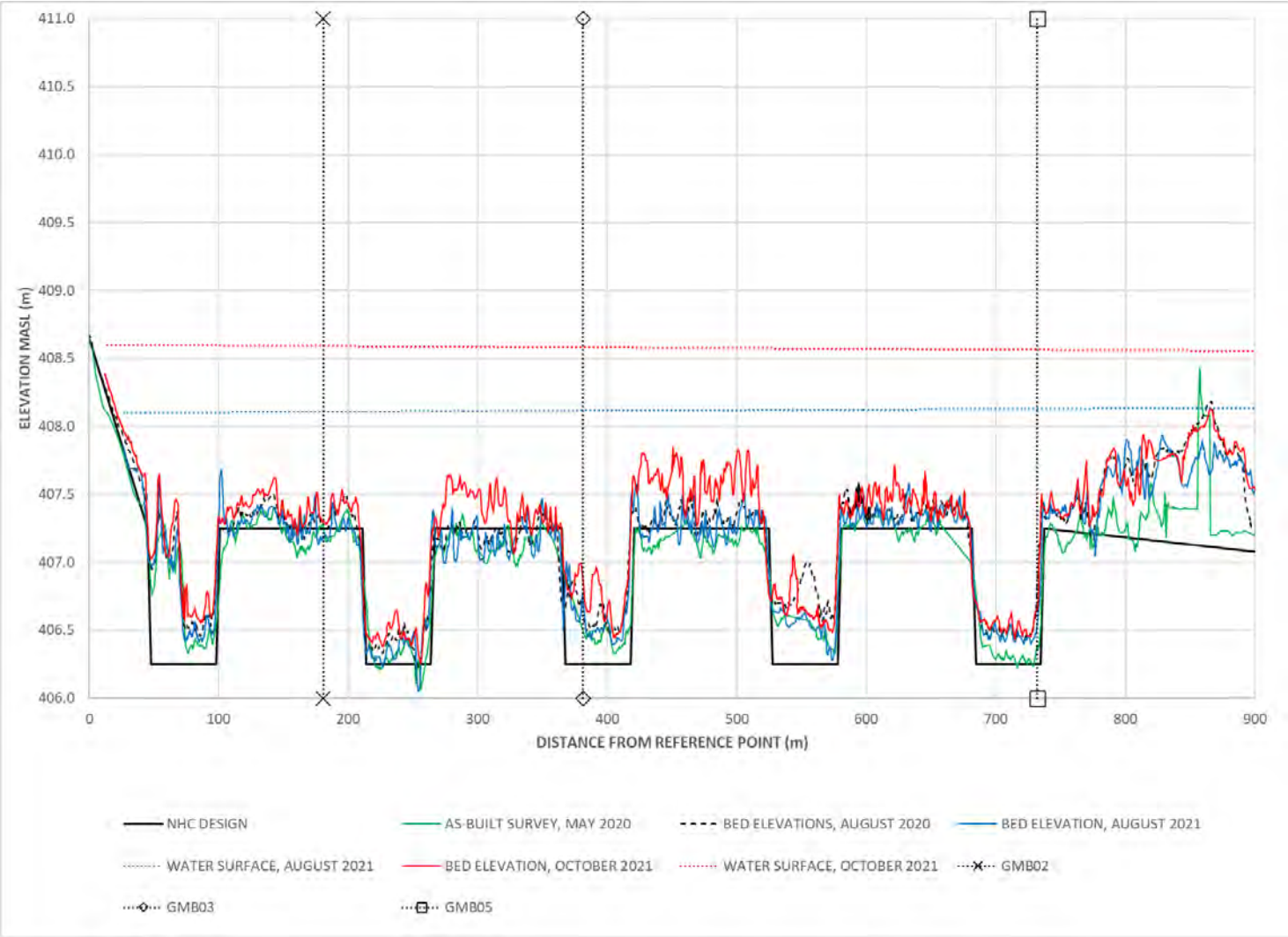


**Figure 6.** **Plots of South Side Channel Spur Extension longitudinal bed profiles and water surface elevations for 2020 (top) and 2021 (bottom) surveys. Also shown are the South Side Channel Spur Extension bed profile in the as-built survey (May 2020) and NHC bed design, and location of transects.**

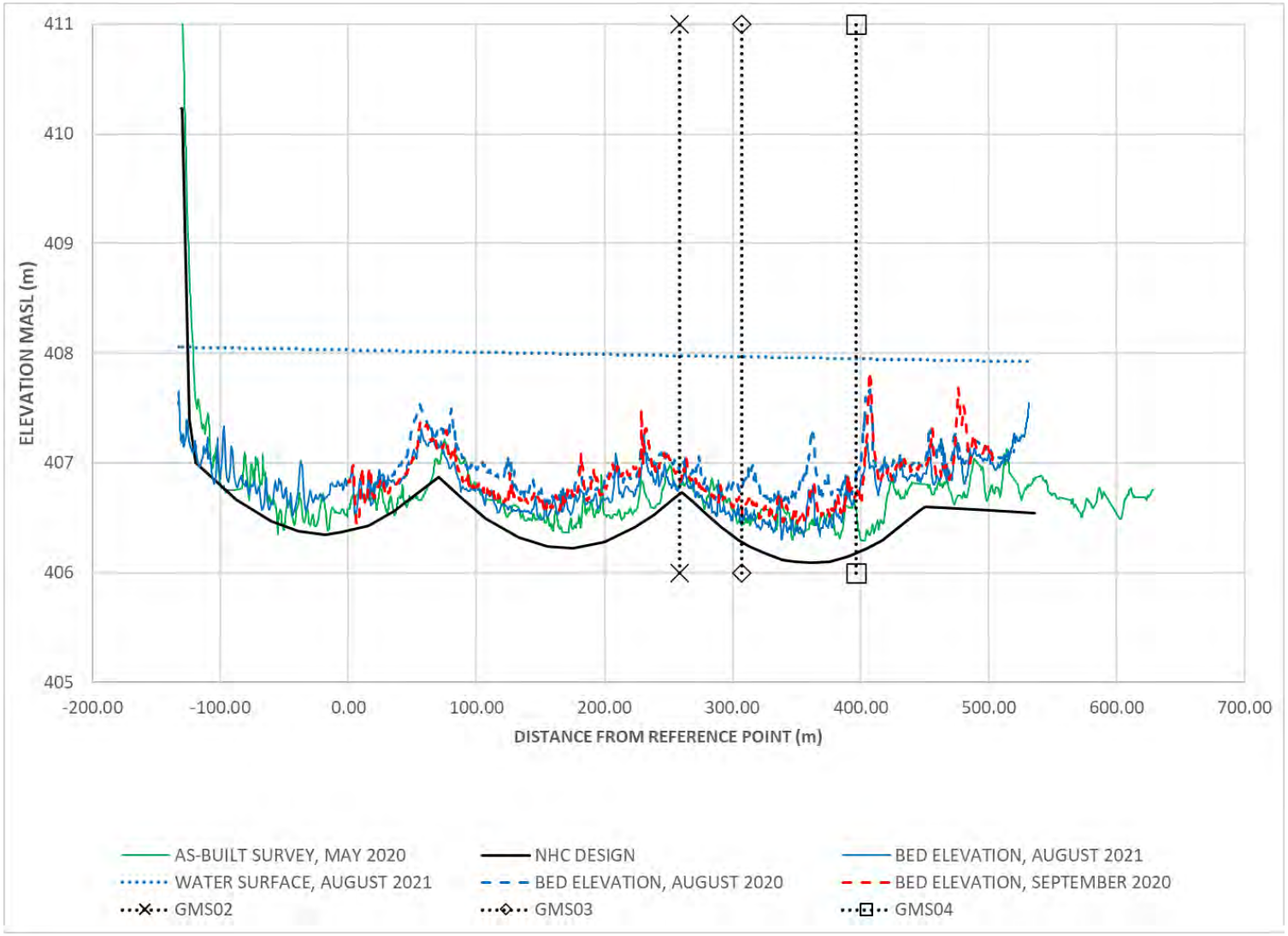


**Figure 7.** **Plots of East Side Channel longitudinal bed profiles and water surface elevations for 2020 (top) and 2021 (bottom) surveys. Also shown are the East Side Channel bed profile in the as-built survey (May 2020) and NHC bed design, and location of transects.**

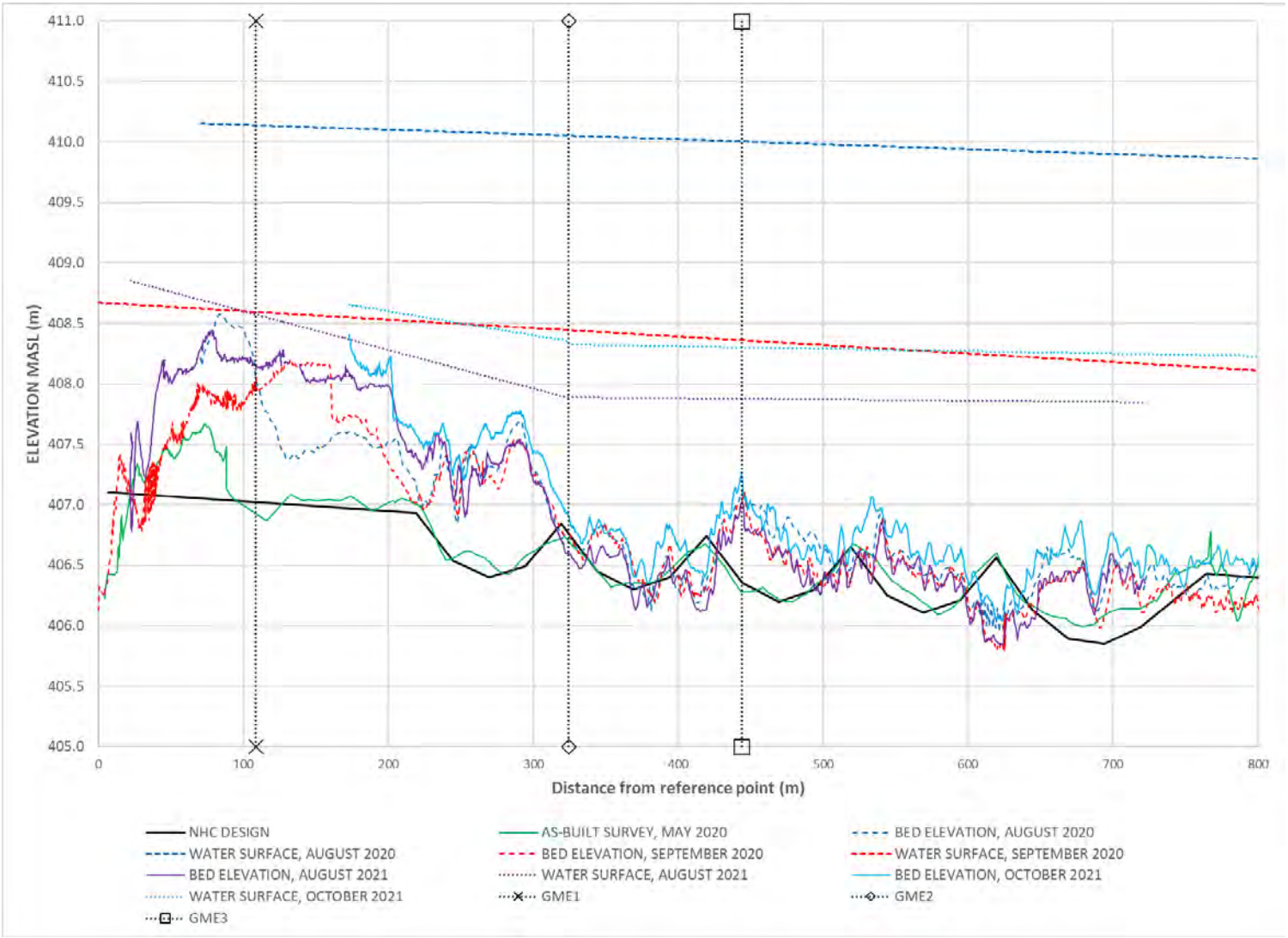


**Figure 8.** **Plots of West Side Channel longitudinal bed profiles and water surface elevations for 2020 (top) and 2021 (bottom) surveys. Also shown are the West Side Channel bed profile in the as-built survey (May 2020) and NHC bed design, and location of transects.**

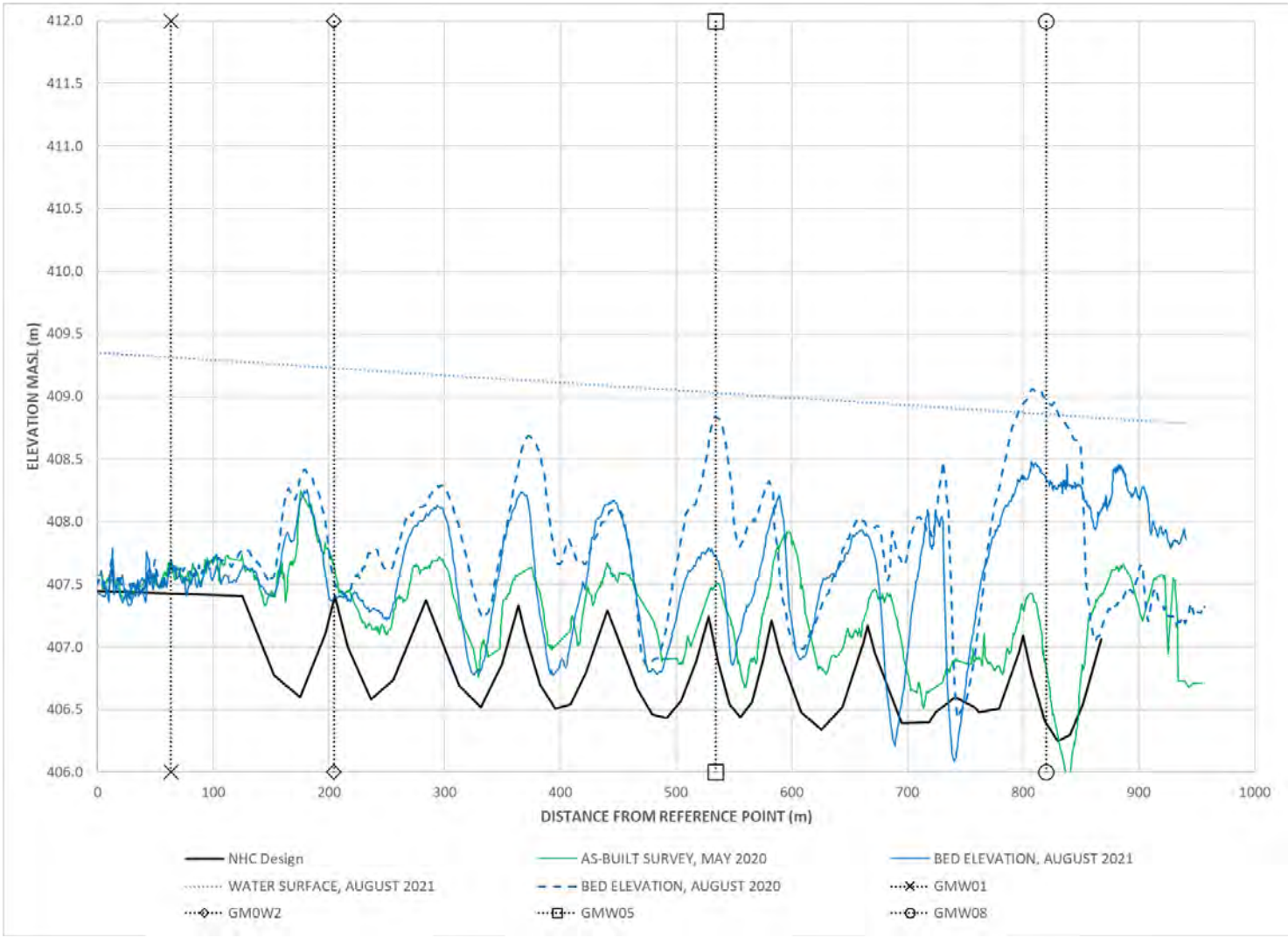


**Figure 9.** **Plots of Main Channel Bar longitudinal bed profiles and water surface elevations for 2020 (top) and 2021 (bottom) surveys. Also shown are the Main Channel Bar bed profile in the as-built survey (May 2020) and NHC bed design, and location of transects.**

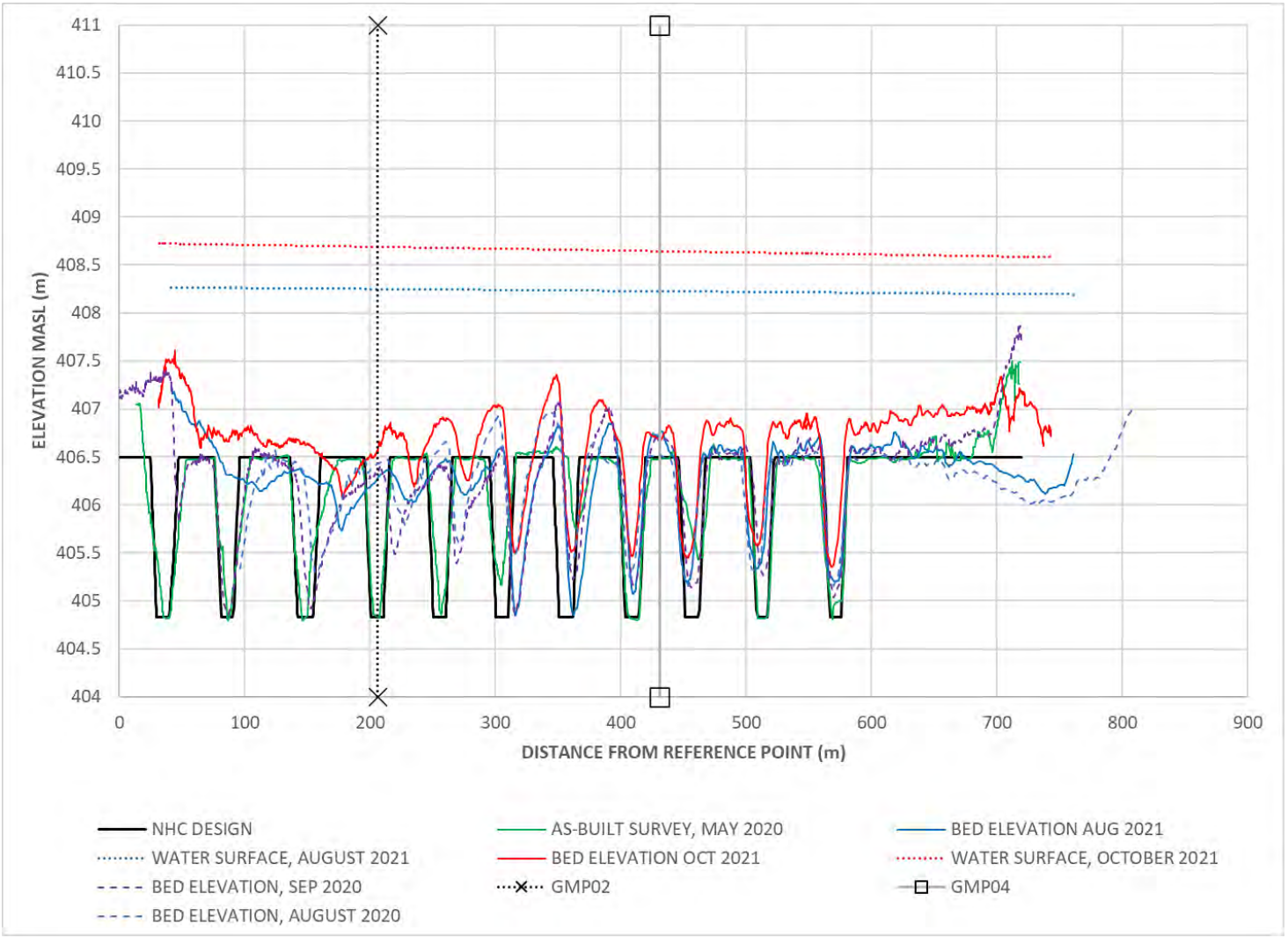
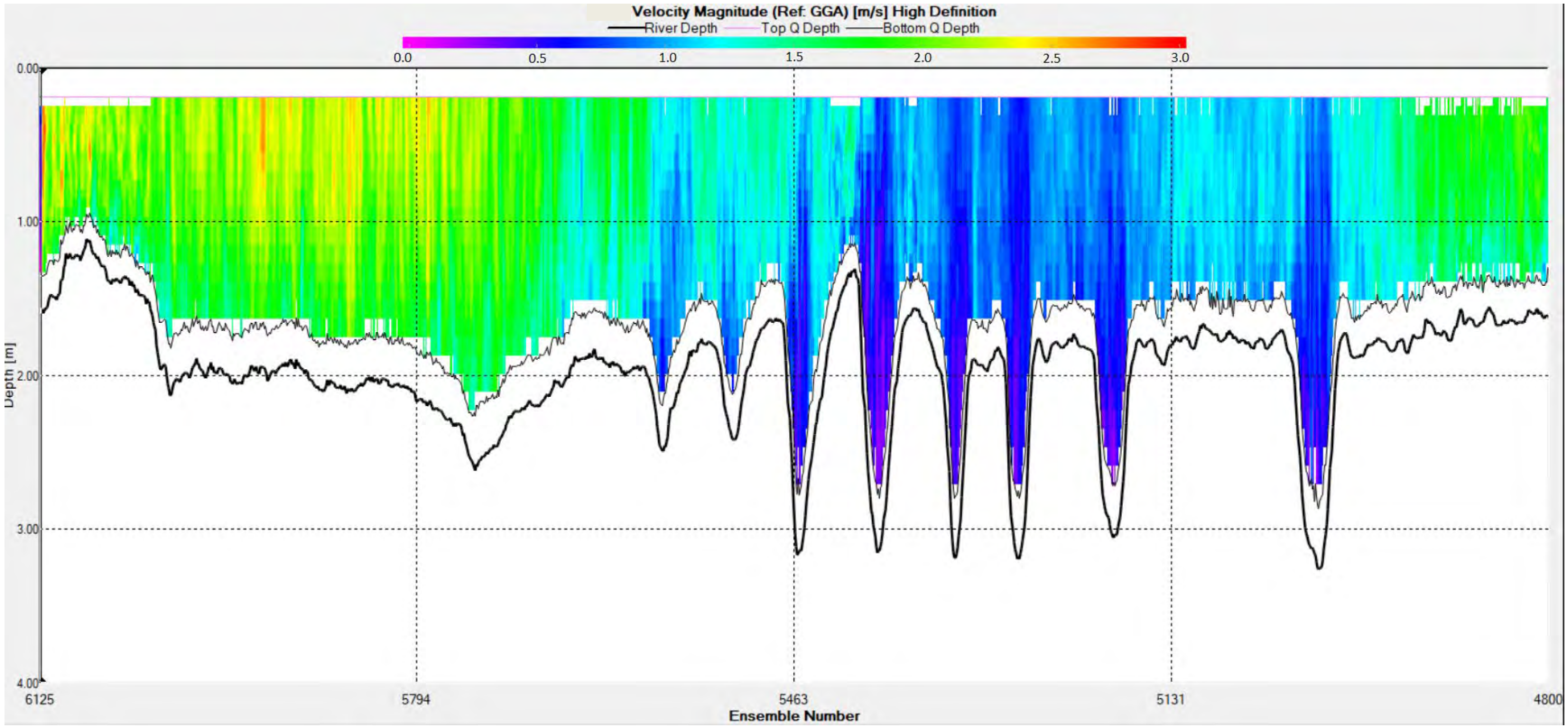


**Figure 10.** **Plot of bed depth and velocity profile along Main Channel Bar on October 1, 2021, during moderate Peace River flows (~900 $m^3/s$).**



#### 4.1.3. Weighted Usable Habitat

Side Channel Site 108R offset habitat is expected to be used by Arctic Grayling, Mountain Whitefish, and Rainbow Trout for feeding and rearing and Walleye for feeding (BC Hydro 2015c). Weighted usable widths (WUW) are summarized by transect in Table 4. Weighted usable area (WUA) is summarized for each channel (and the overall Side Channel Site 108R area) by species for each survey (i.e., August 4-6 and October 1-2, 2021, when Peace River flows were ~743 $m^3/s$ and ~883 – 1,100 $m^3/s$, respectively). The results below describe habitat suitability at the flows present during data collection, but due to variation in depth and velocity at other flows, cannot be considered representative of habitat suitability at all flows that may occur throughout the year.

In September 2021 data collection was limited to the Main Channel Bar, East Side Channel, and Backwater Channel. Data collection was not possible for the West Side Channel or South Side Channel Spur Extension due to equipment failure. The results for WUA and usability by species and channel are described in the following sections.

##### 4.1.3.1. Arctic Grayling

WUA and usability were similar for adult and juvenile Arctic Grayling. During the August surveys, adult Arctic Grayling WUA was 41,487 $m^2$ and usability was 42% of the 99,222 $m^2$ wetted area (Table 4). Usability was highest in the slow water of the Backwater Channel, South Side Channel Spur Extension (89% of each) and in the East Side Channel (68%), while it was lower in the Main Channel Bar and West Side Channel (5% and 19%, respectively) that have faster water velocities. With higher flows in the October survey, WUA and usability for adult Arctic Grayling was lower at 25,903 $m^2$ and 37% of the 69,280 $m^2$ wetted area, respectively. As in August, usability was highest in the Backwater Channel (79%) and East Side Channel (63%) and lower in the Main Channel Bar (3%). WUA and usability for juvenile Arctic Grayling were similar to the adult values. Site-wide usability for all of Side Channel Site 108R was 41% in the August survey and 37% in the October Survey. In individual channels in both surveys, adult and juvenile usability varied by less than 5%.

##### 4.1.3.2. Mountain Whitefish

WUA and usability for adult Mountain Whitefish during the August surveys were 49,276 $m^2$ and 50% of the 99,222 $m^2$ wetted area, respectively, with the highest usability observed in the West Side Channel, Backwater Channel, and South Side Channel Spur Extension (54 - 59%). During the October surveys, WUA and usability for adult Mountain Whitefish were 28,504 $m^2$ and 41% respectively of the 69,280 $m^2$ wetted area. During this survey, usability was similar in the East Side Channel (67%) and Backwater Channel (65%), but lower in the Main Channel Bar (20%).

WUA and usability for juvenile Mountain Whitefish during the August survey were 26,897 $m^2$ and 27% of the 99,222 $m^2$ wetted area, respectively. The lowest usability was in the Main Channel Bar (7%; Table 4), while usability in the other channels ranged from 27 – 47%. During the September survey, WUA and usability for juvenile Mountain Whitefish was 13,740 $m^2$ and 20% of the 69,280 $m^2$ wetted area, respectively. Results were similar for the October survey, when usability was 5% in the Main Channel Bar, 42% in the East Side Channel, and 35% in the Backwater Channel.

#### 4.1.3.3. Rainbow Trout

WUA and usability for Rainbow Trout (juveniles and adults) during the August survey were 42,852 m² and 43% of the 99,222 m² wetted area, respectively. Usability was similar in the East and West Side Channels (65% and 67%, respectively) and comparatively low in the Main Channel Bar and South Side Channel Spur Extension and Backwater Channel (36%, 19%, and 30%, respectively). During the October survey, WUA and usability for Rainbow Trout were 20,079 m² and 29% of the 69,280 m² total wetted area, respectively. As in August, usability was highest in the East Side Channel (80%) and lower in the Main Channel Bar and Backwater Channel (22% and 25%, respectively). Total WUA in the East Side Channel was greater during the September survey, however percentage of WUA was higher during the October survey.

#### 4.1.3.4. Walleye

WUA and usability for Walleye rearing during the August surveys were 33,856 m² and 34% of the 99,222 m² total wetted area, respectively. Percent usable habitat was highest in the slow water of the South Side Channel Spur Extension and the Backwater Channel (62% in both locations), moderate in the East and West side channels (46% and 31% respectively), but notably lower in the Main Channel Bar (6%). During the October survey, WUA and usability for Walleye was 23,295 m² and 34% of the 69,280 m² wetted area, respectively. In October, higher flows increased usability in the East Side Channel and the Backwater Channel (61% and 70%) but slightly decreased usability in the Main Channel Bar (3%).

**Table 4. Weighted usable area (WUA) in Side Channel Site 108R channels for a) Arctic Grayling, b) Mountain Whitefish, c) Rainbow Trout, and d) Walleye.**

## a) Arctic Grayling

| Criteria | Month | Channel | Peace River Discharge ($m^3/s$) | WUA ($m^2$) | Wetted Area ($m^2$) | Usability (%) |
|---|---|---|---|---|---|---|
| Artic Grayling Adult | Aug/2021 | Main Channel Bar | 743 | 1,590 | 33,683 | 5% |
| | | East Side Channel | 743 | 6,400 | 9,430 | 68% |
| | | West Side Channel | 743 | 4,320 | 23,327 | 19% |
| | | South Side Channel Spur Extension | 743 | 7,890 | 8,881 | 89% |
| | | Backwater Channel | 743 | 21,287 | 23,900 | 89% |
| | **Aug-2021 Total** | | **743** | **41,487** | **99,222** | **42%** |
| | Oct/2021 | Main Channel Bar | 883 | 1,208 | 36,584 | 3% |
| | | East Side Channel [1] | 1,002 | 4,466 | 7,093 | 63% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 20,289 | 25,687 | 79% |
| | **Oct-2021 Total** | | **942** | **25,963** | **69,364** | **37%** |
| Arctic Grayling Juvenile | Aug/2021 | Main Channel Bar | 743 | 1,491 | 33,683 | 4% |
| | | East Side Channel | 743 | 6,097 | 9,430 | 65% |
| | | West Side Channel | 743 | 4,031 | 23,327 | 17% |
| | | South Side Channel Spur Extension | 743 | 7,890 | 8,881 | 89% |
| | | Backwater Channel | 743 | 21,287 | 23,900 | 89% |
| | **Aug-2021 Total** | | **743** | **40,796** | **99,222** | **41%** |
| | Oct/2021 | Main Channel Bar | 883 | 1,077 | 36,584 | 3% |
| | | East Side Channel [1] | 1,002 | 4,202 | 7,093 | 59% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 20,289 | 25,687 | 79% |
| | **Oct-2021 Total** | | **942** | **25,568** | **69,364** | **37%** |

[1] Upstream end of longitudunal profile of channel was not surveyed in October 2021 due to shallow water

[2] Longitudunal profile of channel was not surveyed in October 2021

## Table 4. Continued.

### b) Mountain Whitefish

| Criteria | Month | Channel | Peace River Discharge ($m^3/s$) | WUA ($m^2$) | Wetted Area ($m^2$) | Usability (%) |
|---|---|---|---|---|---|---|
| Mountain Whitefish Adult | Aug/2021 | Main Channel Bar | 743 | 13,613 | 33,683 | 40% |
| | | East Side Channel | 743 | 4,060 | 9,430 | 43% |
| | | West Side Channel | 743 | 13,408 | 23,327 | 57% |
| | | South Side Channel Spur Extension | 743 | 5,218 | 8,881 | 59% |
| | | Backwater Channel | 743 | 12,977 | 23,900 | 54% |
| | **Aug-2021 Total** | | **743** | **49,276** | **99,222** | **50%** |
| | Oct/2021 | Main Channel Bar | 883 | 7,170 | 36,584 | 20% |
| | | East Side Channel [1] | 1,002 | 4,780 | 7,093 | 67% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 16,613 | 25,687 | 65% |
| | **Oct-2021 Total** | | **942** | **28,563** | **69,364** | **41%** |
| Mountain Whitefish Juvenile | Aug/2021 | Main Channel Bar | 743 | 2,274 | 33,683 | 7% |
| | | East Side Channel | 743 | 3,735 | 9,430 | 40% |
| | | West Side Channel | 743 | 6,339 | 23,327 | 27% |
| | | South Side Channel Spur Extension | 743 | 3,226 | 8,881 | 36% |
| | | Backwater Channel | 743 | 11,324 | 23,900 | 47% |
| | **Aug-2021 Total** | | **743** | **26,897** | **99,222** | **27%** |
| | Oct/2021 | Main Channel Bar | 883 | 1,764 | 36,584 | 5% |
| | | East Side Channel [1] | 1,002 | 3,012 | 7,093 | 42% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 9,006 | 25,687 | 35% |
| | **Oct-2021 Total** | | **942** | **13,782** | **69,364** | **20%** |

[1]Upstream end of longitudunal profile of channel was not surveyed in October 2021 due to shallow water

[2]Longitudunal profile of channel was not surveyed in October 2021

**Table 4. Continued.**

**c) Rainbow Trout**

| Criteria | Month | Channel | Peace River Discharge ($m^3/s$) | WUA ($m^2$) | Wetted Area ($m^2$) | Usability (%) |
|---|---|---|---|---|---|---|
| Rainbow Trout Juvenile/Adult | Aug/2021 | Main Channel Bar | 743 | 12,122 | 33,683 | 36% |
| | | East Side Channel | 743 | 6,173 | 9,430 | 65% |
| | | West Side Channel | 743 | 15,737 | 23,327 | 67% |
| | | South Side Channel Spur Extension | 743 | 1,692 | 8,881 | 19% |
| | | Backwater Channel | 743 | 7,128 | 23,900 | 30% |
| | **Aug-2021 Total** | | **743** | **42,852** | **99,222** | **43%** |
| | Oct/2021 | Main Channel Bar | 883 | 8,121 | 36,584 | 22% |
| | | East Side Channel [1] | 1,002 | 5,670 | 7,093 | 80% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 6,366 | 25,687 | 25% |
| | **Oct-2021 Total** | | **942** | **20,157** | **69,364** | **29%** |

[1]Upstream end of longitudunal profile of channel was not surveyed in October 2021 due to shallow water

[2]Longitudunal profile of channel was not surveyed in October 2021

**d) Walleye**

| Criteria | Month | Channel | Peace River Discharge ($m^3/s$) | WUA ($m^2$) | Wetted Area ($m^2$) | Usability (%) |
|---|---|---|---|---|---|---|
| Walleye Adult Rearing | Aug/2021 | Main Channel Bar | 743 | 1,877 | 33,683 | 6% |
| | | East Side Channel | 743 | 4,317 | 9,430 | 46% |
| | | West Side Channel | 743 | 7,328 | 23,327 | 31% |
| | | South Side Channel Spur Extension | 743 | 5,487 | 8,881 | 62% |
| | | Backwater Channel | 743 | 14,847 | 23,900 | 62% |
| | **Aug-2021 Total** | | **743** | **33,856** | **99,222** | **34%** |
| | Oct/2021 | Main Channel Bar | 883 | 1,168 | 36,584 | 3% |
| | | East Side Channel [1] | 1,002 | 4,306 | 7,093 | 61% |
| | | West Side Channel[2] | - | - | - | - |
| | | South Side Channel Spur Extension[2] | - | - | - | - |
| | | Backwater Channel | 942 | 17,865 | 25,687 | 70% |
| | **Oct-2021 Total** | | **942** | **23,339** | **69,364** | **34%** |

[1]Upstream end of longitudunal profile of channel was not surveyed in October 2021 due to shallow water

[2]Longitudunal profile of channel was not surveyed in October 2021

#### 4.1.4. Substrate and Channel Morphology

The condition of LWD structures, substrates, channel profiles, and vegetation were assessed visually on September 5, 2021 when Peace River flows were low (approximately 450 $m^3/s$). (photos are available in Appendix C). Visual assessments of the functionality of the offset channels were also completed at higher flow ranges during the physical habitat transect surveys and fish sampling. Few instances of aquatic vegetation were noted upon analysis of the photo/video recordings, except in the backwater channel where instances of macrophyte growth were observed.

#### 4.1.4.1. Backwater Channel

The low-velocity Backwater Channel had a high percentage of fines with mostly gravel and cobble substrates exposed along the banks. The substrate in deep portions of the thalweg was not visually assessed, although a high percentage of fines was observed in the mid-depth areas that become visible at low flows. In particular, the transect midway along the length of the Backwater Channel had a high degree of fines, suggesting that sediment is settling at this point. There was minor evidence of bank erosion and sloughing, although the bank profile generally matched the design (NHC 2016). Notable macrophyte growth was present throughout the channel (see photos in Appendix C).

#### 4.1.4.2. South Side Channel Spur Extension

Stream substrate within the South Side Channel Spur Extension was dominated by silt and fine sediment, with some gravel and little cobble present (Table 5). At low flows, submerged boulder clusters were visible, but these were covered with a thick layer of fine sediment, which may have reduced interstitial spaces among boulders. Aquatic macrophytes were not common during the survey, although colonization by aquatic macrophytes is expected to occur over time.

#### 4.1.4.3. East Side Channel

Stream substrate within the East Side Channel was predominantly gravel and cobble, with some fine sediment present. Buried root wads were structurally intact and provided good instream cover and refuge from high flows. The structures were partially dewatered under low flows (450 $m^3/s$) but still offered some cover for fish. The vertical debris catcher pilings were intact and had begun to accumulate additional woody debris. The pilings and buried root wads that provide protection on both banks at the inlet to the channel were also intact. Sloughing and erosion were observed along the banks of the East Side Channel. During the survey on September 6, 2021, the field crew observed that approximately 100 m of the upstream end of the East Side Channel was dewatered, and flow in the downstream portion appeared to be driven by sub-surface inputs (Figure 11). Water in the channel was notably less turbid than in other channels. Several isolated pools were observed in the dewatered section, which could present a stranding risk to fish. This channel had connected flow through it during the August (743 $m^3/s$) and October (~903 $m^3/s$) physical habitat surveys. Aquatic macrophytes were not observed within the East Side Channel.

#### 4.1.4.4. West Side Channel

Physical habitat characteristics of the West Side Channel were similar to those of the East Side Channel, although stream substrate was slightly larger and more dominated by cobble (Table 5). Debris catcher pilings were intact and were accumulating additional woody debris. There was some evidence of bank erosion and sloughing of gravels and cobbles throughout the channel, though erosion and sloughing were not more significant than in Year 1. As in Year 1, erosion was visible on the right bank within the lower portion of the channel, upstream of the confluence with the South Side Channel. At low flows (i.e., 450 $m^3/s$), an isolated pool formed that may pose a risk of fish stranding. There was evidence of continuing deposition of gravel and cobble in the South Side Channel downstream of the West Side Channel confluence, as indicated by the presence

of an alluvial fan forming in the South Side Channel. Aquatic macrophytes were not observed within the West Side Channel.

#### 4.1.4.5. Main Channel Bar

Substrate at the Main Channel Bar generally consisted of cobble with some gravel and few fines. Observations at this location were made of the dewatered substrate visible during low flows in the Peace River, and of the underwater substrate within approximately 5 m of shore. Aquatic macrophytes were not observed in the Main Channel Bar.

#### 4.1.4.6. South Side Channel

No physical habitat transects are located within the South Side Channel as the area was not enhanced.

**Table 5. Summary of substrate classification by channel within Site C 108R in 2021.**

| Area | Transect | Substrate Class (%) [1] | | | | |
|---|---|---|---|---|---|---|
| | | Silt/fines | Gravel | Cobble | Boulder | Bedrock |
| **Backwater Channel** | GMB01 | 17.0 | 60.5 | 22.5 | 0.0 | 0.0 |
| | GMB02 | 33.3 | 53.3 | 13.3 | 0.0 | 0.0 |
| | GMB03 | 79.2 | 15.0 | 5.8 | 0.0 | 0.0 |
| | GMB04 | 30.0 | 47.5 | 22.5 | 0.0 | 0.0 |
| | GMB05 | 17.5 | 52.0 | 30.5 | 0.0 | 0.0 |
| **Total** | | **33.8** | **45.1** | **21.1** | **0.0** | **0.0** |
| **East Side Channel** | GME01 | 1.8 | 46.1 | 52.1 | 0.0 | 0.0 |
| | GME02 | 16.2 | 52.7 | 31.4 | 0.0 | 0.0 |
| | GME03 | 10.3 | 56.7 | 33.4 | 0.0 | 0.0 |
| | GME04 | 5.5 | 76.3 | 19.0 | 0.0 | 0.0 |
| | GME05 | 6.7 | 82.5 | 10.8 | 0.0 | 0.0 |
| **Total** | | **9.1** | **55.9** | **35.3** | **0.0** | **0.0** |
| **Main Channel Bar** | GMP01 | 3.5 | 28.2 | 69.0 | 0.0 | 0.0 |
| | GMP02 | 7.8 | 36.9 | 55.3 | 0.0 | 0.0 |
| | GMP03 | 3.8 | 45.0 | 51.3 | 0.0 | 0.0 |
| | GMP04 | 13.8 | 29.3 | 56.7 | 0.0 | 0.0 |
| **Total** | | **9.9** | **33.2** | **57.1** | **0.0** | **0.0** |
| **South Side Channel Spur Extension** | GMS04 | 62.1 | 17.9 | 4.5 | 6.0 | 0.0 |
| | GMS03 | 63.5 | 26.3 | 10.2 | 0.0 | 0.0 |
| | GMS02 | 70.0 | 21.4 | 8.6 | 0.0 | 0.0 |
| **Total** | | **65.1** | **21.7** | **7.7** | **2.1** | **0.0** |
| **West Side Channel** | GMW01 | 11.7 | 13.5 | 74.6 | 0.0 | 0.0 |
| | GMW02 | 7.7 | 43.3 | 48.1 | 0.0 | 0.0 |
| | GMW05 | 9.8 | 53.5 | 36.4 | 0.0 | 0.0 |
| | GMW07 | 0.7 | 42.5 | 56.8 | 0.0 | 0.0 |
| | GMW08 | 0.6 | 55.9 | 43.6 | 0.0 | 0.0 |
| **Total** | | **5.6** | **42.2** | **52.0** | **0.0** | **0.0** |

[1] Silt/fines: 0-2 mm, Gravel: 2 - 64 mm, Cobble: 65-264 mm, Boulder: 265 - 4000mm

**Figure 11. Dewatering present in the uppermost ~150 m of the East Side Channel on September 6, 2021 (discharge of approximately 450 $m^3/s$).**

4.2. Fish Community in 2021

4.2.1. Small-fish Boat Electroshocking

Small-fish boat electroshocking was conducted from August 4 to October 31, 2021. For photos of fish sampling and examples of individual fish captured by all methods consult Appendix A. A total of 13,947 m of linear habitat was electroshocked with 18,033 seconds of electroshocking effort applied (Table 6). Discharge in the Peace River was more consistent in Year 2 than Year 1; discharge measured between 744 $m^3/s$ in August and 1,080 $m^3/s$ in October (Year 1 discharge ranged from 2,134 $m^3$ to 392 $m^3/s$). Conductivity and water temperatures were within guidelines during all electroshocking surveys (170 – 620 µS/cm and 6.4 ºC to 21.0°C[11]) across all dates (Table 6). Water visibility varied between 0.4 and 2.5 m.

Small boat electrofishing yielded a catch of 266 fish, for a total CPUE of 3.25 fish/km-hour (Table 7)[12]. Of the indicator species, Mountain Whitefish had the highest yield (129 fish; 1.58 fish/km-hour), followed by Walleye (9 fish; 0.11 fish/km-hour) and Bull Trout (3 fish;

[11] Note that three temperature exceedances up to 21.0°C were recorded in the Backwater Channel on August 4, 2021, however, these are expected to be the artifact of sampling in a shallow, low flow location, near the surface and, the deeper water sampled by boat electrofishing would be below 20°C.

[12] Note that electrofishing effort is presented in seconds, but effort within CPUE is presented in minutes, to allow for a more intuitive presentation of results.

0.04 fish/km-hour). Combined total CPUE for non-indicator species was 1.49 fish/km-hour. For a detailed breakdown of species captures by site, see Appendix D.

The highest catch rate during small-fish boat electroshocking was in the South Side Channel Spur Extension (83 fish; 29.38 fish/km-hour; Table 7), followed by the West Side Channel (67 fish; 24.70 fish/km-hour), the East Side Channel (50 fish; 17.56 fish/km-hour), the Backwater Channel (40 fish; 11.80 fish/km-hour), and the South Side Channel (26 fish; 5.54 fish/km-hour). Indicator species were captured in all the offset channels (Appendix D).

**Table 6. Summary of site conditions and sampling effort during small-fish boat electroshocking surveys in Side Channel Site 108R offset habitat, August – October 2021. The Main Channel Bar was not sampled.**

| Channel | Site | Date | Discharge ($m^3/s$) | Electofisher Model | Cloud Cover [1] | Water Surface Visibility | Water Visibility (m) | Water Temp (ºC) | Conductivity (µS/cm) | Settings | | Length (m) | Effort (seconds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Percent | Frequency (Hz) | | |
| Backwater Channel | PCR-OCES03 | 4-Aug-2021 | 746 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.4 | 21.0 | 620 | 50 | 30 | 723 | 1,106 |
| | PCR-OCES04 | 4-Aug-2021 | 746 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.4 | 21.0 | 620 | 50 | 30 | 723 | 1,103 |
| | | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.7 | 170 | 20 | 30 | 723 | 225 |
| | PCR-SB07 | 4-Aug-2021 | 746 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.4 | 21.0 | 540 | 55 | 30 | 479 | 597 |
| | | 26-Sep-2021 | 1030 | GPP 2.5 | Unbroken clouds | High (flat surface) | 1.2 | 11.7 | 193.2 | 13 | 60 | 500 | 847 |
| | | | | | | | | | | | **Area Total** | **3,148** | **3,878** |
| East Side Channel | PCR-OCES07 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 2.5 | 14.2 | 200 | 50 | 30 | 512 | 836 |
| | | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.4 | 170 | 20 | 30 | 412 | 709 |
| | PCR-OCES08 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 2 | 13.2 | 210 | 50 | 30 | 523 | 679 |
| | | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.4 | 170 | 20 | 30 | 700 | 1,073 |
| | | | | | | | | | | | **Area Total** | **2,147** | **3,297** |
| South Side Channel | PCR-OCES01 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 1.5 | 16.3 | 220 | 40 | 30 | 527 | 609 |
| | | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.7 | 170 | 22 | 30 | 509 | 799 |
| | PCR-OCES02 | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.7 | 170 | 20 | 30 | 1,300 | 1,666 |
| | PCR-OCES09 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 1.3 | 14.3 | 220 | 35 | 30 | 437 | 532 |
| | PCR-OCES10 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 2 | 13.5 | 210 | 45 | 30 | 389 | 432 |
| | PCR-OCES11 | 4-Aug-2021 | 746 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.4 | n/c | 540 | 55 | 30 | 480 | 597 |
| | | | | | | | | | | | **Area Total** | **3,642** | **4,635** |
| South Side Channel Spur Extension | PCR-OCES05 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.7 | 13.1 | 290 | 40 | 30 | 668 | 935 |
| | | 31-Oct-2021 | 1080 | GPP5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.9 | 270 | 22 | 30 | 668 | 978 |
| | PCR-OCES06 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 0.7 | 14.8 | 280 | 45 | 30 | 675 | 807 |
| | | 31-Oct-2021 | 1080 | GPP 5.0 | Clear (0-10%) | High (flat surface) | to bottom | 6.9 | 270 | 22 | 30 | 675 | 1,067 |
| | | | | | | | | | | | **Area Total** | **2,686** | **3,787** |
| West Side Channel | PCR-OCES12 | 5-Aug-2021 | 744 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 2 | 13.3 | 220 | 45 | 30 | 779 | 913 |
| | | 30-Oct-2021 | 1120 | GPP5.0 | Clear (0-10%) | High (flat surface) | n/c | 6.7 | 170 | 20 | 30 | 729 | 772 |
| | PCR-OCES13 | 4-Aug-2021 | 746 | GPP 5.0 | Clear (0-10%) | High (flat surface) | 2 | 13.2 | 200 | 40 | 30 | 816 | 751 |
| | | | | | | | | | | | **Area Total** | **2,324** | **2,436** |
| | | | | | | | | | | | **Grand Total** | **13,947** | **18,033** |

[1] Clear = <10% cloud; Partly Cloudy = 10-50% cloud, Mostly Cloudy = 50-90% cloud; Overcast = >90% cloud, n/c = not collected

**Table 7. Summary of fish captured by small-fish boat electroshocking in Year 2 (2021); the Main Channel Bar was not sampled.**

| Channel [1] | Species [2] | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Arctic Grayling | | Bull Trout | | Burbot | | Mountain Whitefish | | Rainbow Trout | | Walleye | | Non-Indicator Species | | All Species | |
| | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] |
| Backwater Channel | 0 | 0.00 | 0 | 0.00 | 1 | 0.29 | 9 | 2.65 | 0 | 0.00 | 7 | 2.06 | 23 | 6.78 | 40 | 11.80 |
| East Side Channel | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 27 | 9.48 | 0 | 0.00 | 0 | 0.00 | 23 | 8.08 | 50 | 17.56 |
| South Side Channel | 0 | 0.00 | 1 | 0.21 | 1 | 0.21 | 10 | 2.13 | 0 | 0.00 | 1 | 0.21 | 13 | 2.77 | 26 | 5.54 |
| West Side Channel | 0 | 0.00 | 2 | 0.74 | 0 | 0.00 | 55 | 20.28 | 1 | 0.37 | 1 | 0.37 | 8 | 2.95 | 67 | 24.70 |
| South Side Channel Spur Extension | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 28 | 9.91 | 0 | 0.00 | 0 | 0.00 | 55 | 19.47 | 83 | 29.38 |
| **Total [3]** | **0** | **0.00** | **3** | **0.04** | **2** | **0.02** | **129** | **1.58** | **1** | **0.01** | **9** | **0.11** | **122** | **1.49** | **266** | **3.25** |

[1] Only channels sampled are shown

[2] CPUE = Catch Per Unit Effort (fish/km-hour)

[3] Total CPUE (per species) was calculated as total catch/total effort

### 4.2.2. Large-Fish Boat Electroshocking

Large-fish boat electroshocking was repeated at three locations within Side Channel Site 108R (the East Side Channel, West Side Channel, and the Main Channel Bar of the mainstem of the Peace River). Sampling was carried out on four occasions from late August to late September 2021 (Table 8). Daily average discharge ranged from 572 $m^3/s$ to 873 $m^3/s$. In total, 8,024 m of habitat were electroshocked during 7,348 seconds of effort.

Over the course of sampling 517 fish were captured (Table 9). Of the indicator species, Mountain Whitefish were the most numerous (266 individuals; 16.24 fish/km/hour), followed by Walleye (15 individuals; 0.92 fish/min) and Bull Trout (8 individuals; 0.49 fish/km-hour) (Table 9). A total of 228 non-indicator fish were captured, with a CPUE of 13.92 fish/km-hour. No Rainbow Trout, Arctic Grayling, Burbot or Goldeye were captured. For a detailed breakdown of catch by species see Appendix D.

CPUE was highest in the Main Channel Bar (178 fish captured; 115.89 fish/km-hour), followed by the West Side Channel (219 fish captured; 101.20 fish/km-hour) and the East Side Channel (120 fish captured; 70.93 fish/km-hour; Table 9).

**Table 8. Summary of site conditions and sampling effort during large-fish boat electroshocking surveys in the Peace River in August and September 2021. All sampling used an SRH-18H electroshocking boat.**

| Channel | Site | Date | Discharge ($m^3/s$)[1] | Water Temp (ºC) | Air Temp (ºC) | Conductivity (µS/cm) | Water Visibility (m) | Cloud Cover[2] | Model | Settings | | Site Length (m) | Effort (seconds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Percent | Amperes | | |
| East Side Channel | OEM-DSC | 17-Aug-2021 | 873 | 13.1 | 12 | 180 | 1.1 | Partly Cloudy (10-50%) | SR-18H (Cas) | 15 | 4 | 660 | 805 |
| | | 24-Aug-2021 | 632 | 13.1 | 15 | 200 | 0.2 | Clear (0-10%) | SR-18H (Cas) | 15 | 4 | 560 | 721 |
| | | 1-Sep-2021 | 572 | 11.8 | 10 | 180 | 0.65 | Overcast (90-100%) | SR-18H (Cas) | 15 | 4 | 560 | 685 |
| | | 14-Sep-2021 | 678 | 11.26 | 15 | 210 | 1.1 | overcast | SR-18H Cal | 41 | 2.5 | 451 | 519 |
| | | | | | | | | | | | **Channel Effort** | **2,231** | **2,730** |
| Main Channel Bar | OEM-MS | 16-Aug-2021 | 533 | 14 | 15 | 170 | 1.2 | Mostly Cloudy (51-90%) | SR-18H (Cas) | 15 | 3.9 | 740 | 505 |
| | | 25-Aug-2021 | 513 | 14 | 22 | 180 | 0.25 | Clear (0-10%) | SR-18H (Cas) | 15 | 4 | 740 | 461 |
| | | 1-Sep-2021 | 572 | n/c | 17 | 180 | 1.2 | Partly Cloudy (10-50%) | SR-18H (Cas) | 15 | 4 | 740 | 494 |
| | | 14-Sep-2021 | 678 | 11.33 | 14 | 220 | 1.1 | overcast | SR-18H Cal | 44 | 2.5 | 740 | 408 |
| | | | | | | | | | | | **Channel Effort** | **2,960** | **1,868** |
| West Side Channel | OEM-USC | 17-Aug-2021 | 873 | 13.3 | 15 | 170 | 1 | Clear (0-10%) | SR-18H (Cas) | 15 | 4 | 890 | 700 |
| | | 24-Aug-2021 | 632 | 14.4 | 20 | 200 | 0.2 | Clear (0-10%) | SR-18H (Cas) | 15 | 4 | 950 | 860 |
| | | 1-Sep-2021 | 572 | 12.1 | 12 | 170 | 1.1 | Overcast (90-100%) | SR-18H (Cas) | 16 | 4 | 810 | 739 |
| | | 15-Sep-2021 | 921 | 11 | 13 | 200 | 1.5 | mostly cloudy | SR-18H Cal | 45 | 2.5 | 183 | 451 |
| | | | | | | | | | | | **Channel Effort** | **2,833** | **2,750** |
| | | | | | | | | | | | **Total Effort** | **8,024** | **7,348** |

[1] Discharge represented as daily average, measured at the PAP WSC gauge in the Peace River mainstem

[2] Clear = <10% cloud; Partly Cloudy = 10-50% cloud, Mostly Cloudy = 50-90% cloud; Overcast = >90% cloud, n/c = not collected

**Table 9. Summary of fish captured through large-fish boat electroshocking in Year 2 (2021); only the East Side Channel, West Side Channel and the Main Channel Bar were sampled.**

| Channel [1] | Species | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Arctic Grayling | | Bull Trout | | Burbot | | Mountain Whitefish | | Rainbow Trout | | Walleye | | Non-Indicator | | All Species | |
| | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] |
| East Side Channel | 0 | 0.00 | 2 | 1.18 | 0 | 0.00 | 50 | 29.55 | 0 | 0.00 | 1 | 0.59 | 67 | 39.60 | 120 | 70.93 |
| West Side Channel | 0 | 0.00 | 3 | 1.39 | 0 | 0.00 | 122 | 56.37 | 0 | 0.00 | 9 | 4.16 | 85 | 39.28 | 219 | 101.20 |
| Main Channel Bar | 0 | 0.00 | 3 | 1.95 | 0 | 0.00 | 94 | 61.20 | 0 | 0.00 | 5 | 3.26 | 76 | 49.48 | 178 | 115.89 |
| **Total [3]** | **0** | **0.00** | **8** | **0.49** | **0** | **0.00** | **266** | **16.24** | **0** | **0.00** | **15** | **0.92** | **228** | **13.92** | **517** | **31.57** |

[1] Only channels sampled are shown

[2] CPUE = Catch Per Unit Effort (fish/km-hour)

[3] Total CPUE (per species) was calculated as total catch/total effort

#### 4.2.3. Backpack Electrofishing

In Year 2, 9,755 seconds of backpack electrofishing were carried out across 1,288 m of shoreline (Table 10). Most of this effort was targeted in the East and West Side Channels (3,867 seconds and 4,380 seconds, respectively), with an additional 1,508 seconds conducted in the South Side Channel.

In total, 422 fish were captured, and CPUE was 120.91 fish/km-hour. Few indicator species were captured; fourteen Burbot were captured across all sites (4.01 fish/km-hour), but no other indicator species were observed. The most fish were caught in the South Side Channel (189 individuals; 2118.28 fish/km-hour) followed by the West Side Channel (132 individuals; 182.96 fish/km-hour) and the East Side Channel (101 individuals; 195.08 fish/km-hour; Table 11). For a detailed breakdown of catch by species, see Table 8 in Appendix D.

**Table 10. Summary of site conditions and sampling effort during backpack electrofishing surveys in the Peace River in August - October 2021.**

| Channel | Site | Date | Daily Average Discharge ($m^3/s$) | Water Temp (°C) | Conductivity (µS/cm) | Estimated Visibility (m) | EF Model | Settings | | | Site Length (m) | Effort (seconds) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Volts (V) | Frequency (Hz) | Duty Cycle (%) | | |
| East Side Channel | PCR-BP03 | 26-Sep-2021 | 1,030 | 12.0 | 200 | 1.2 | 12-B | 200 | 60 | 36 | 105 | 752 |
| | | 25-Oct-2021 | 949 | 8.3 | 200 | | LR-24 | 300 | 60 | 12 | 77 | 891 |
| | PCR-OCEF03 | 5-Aug-2021 | 744 | 13.0 | 180 | 1.5 | 12-B | 500 | 60 | n/c | 100 | 901 |
| | | 25-Oct-2021 | 949 | 8.3 | 200 | | LR24 | 300 | 60 | 12 | 100 | 691 |
| | PCR-OCEF05 | 5-Aug-2021 | 744 | 13.3 | 180 | 1.5 | 12-B | 500 | 60 | | 100 | 632 |
| | | | | | | | | | | **Channel Total** | **482** | **3,867** |
| South Side Channel | PCR-OCEF06 | 5-Aug-2021 | 744 | 13.8 | 180 | 1.5 | 12-5R | 500 | 60 | n/c | 100 | 730 |
| | | 25-Oct-2021 | 949 | 8.3 | 200 | 3 | LR24 | 300 | 60 | 12 | 113 | 778 |
| | | | | | | | | | | **Channel Total** | **213** | **1,508** |
| West Side Channel | PCR-BP01 | 26-Sep-2021 | 1,030 | 12.1 | 185 | 1.3 | 12-B | 200 | 60 | 36 | 100 | 835 |
| | | 25-Oct-2021 | 949 | 9.4 | 190 | 2 | LR24 | 300 | 60 | 12 | 93 | 661 |
| | PCR-OCEF02 | 5-Aug-2021 | 744 | 13.1 | 180 | 1.5 | 12-B | 500 | 60 | n/c | 100 | 505 |
| | | 25-Oct-2021 | 949 | 9.0 | 190 | 2 | LR24 | 300 | 60 | 12 | 110 | 901 |
| | PCR-OCEF04 | 26-Oct-2021 | 976 | 8.3 | 200 | 3 | LR24 | 300 | 60 | 12 | 90 | 784 |
| | PCR-OCEF07 | 5-Aug-2021 | 744 | 13.2 | 180 | 1.5 | 12-B | 500 | 60 | n/c | 100 | 694 |
| | | | | | | | | | | **Channel Total** | **593** | **4,380** |
| | | | | | | | | | | **Grand Total** | **1,288** | **9,755** |

**Table 11. Summary of indicator species captured by backpack electrofishing in Year 2 (2021).**

| Channel [1] | Species | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Arctic Grayling | | Bull Trout | | Burbot | | Mountain Whitefish | | Rainbow Trout | | Walleye | | Non-Indicator | | All Species | |
| | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] | Catch | CPUE [2] |
| East Side Channel | 0 | 0.00 | 0 | 0.00 | 1 | 1.93 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 100 | 193.14 | 101 | 195.08 |
| South Side Channel | 0 | 0.00 | 0 | 0.00 | 11 | 123.29 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 178 | 1994.99 | 189 | 2118.28 |
| West Side Channel | 0 | 0.00 | 0 | 0.00 | 2 | 2.77 | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 130 | 180.18 | 132 | 182.96 |
| **Total [3]** | **0** | **0.00** | **0** | **0.00** | **14** | **4.01** | **0** | **0.00** | **0** | **0.00** | **0** | **0.00** | **408** | **116.90** | **422** | **120.91** |

[1] Only areas sampled are shown

[2] CPUE = Catch Per Unit Effort (fish/km-hour)

[3] Total CPUE (per species) was calculated as total catch/total effort

#### 4.2.4. Minnow and Hoop Trapping, Gillnetting and Beach Seining

Due to the low catch of indicator species, data tables for minnow and hoop trapping, gillnetting and beach seining have been placed in Appendix D. In total 842 hours of trapping with minnow and hoop traps were completed between late August and early October. Trapping was concentrated in the East, West, and South Side Channels. A total of four fish were captured (all in minnow traps): three sucker spp. in the South Side Channel Spur Extension and one Longnose Sucker in the West Side Channel. None of the fish captured were indicator species.

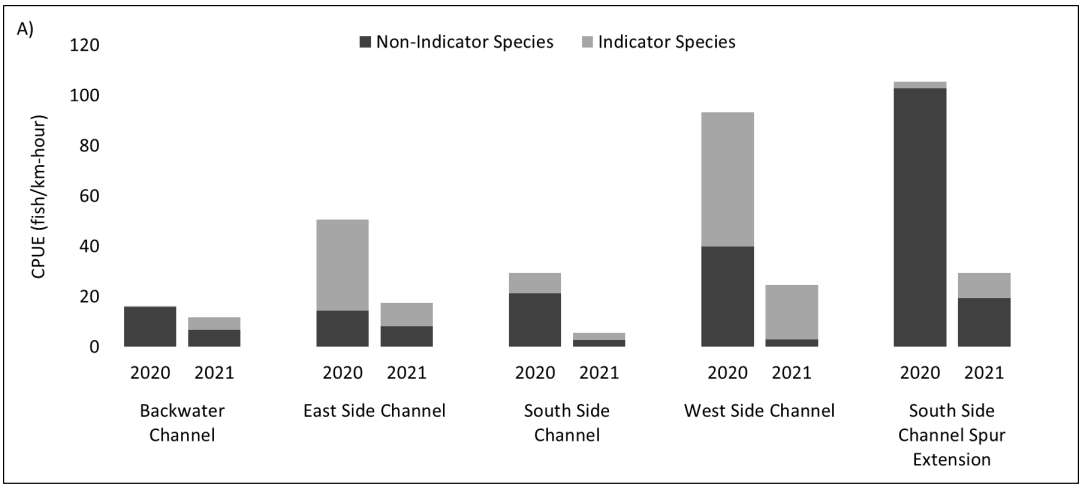
Three gill net sets were made between late September and late October. A total of 6.5 hours of gillnetting was conducted, with each set ranging between 2.0 and 2.3 hours. Twenty-seven fish were captured in the East Side Channel, including 22 sucker spp., 4 Northern Pike, and 1 Mountain Whitefish. A Mountain Whitefish and a White Sucker were captured in the South Side Channel. All fish captured were adults. No fish were captured at the site located in the Backwater Channel.

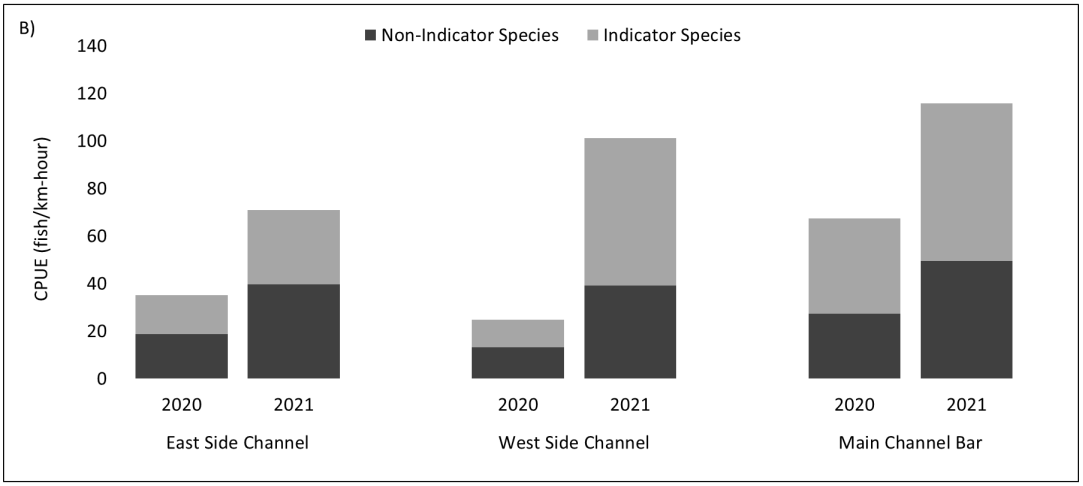
Beach seining was conducted in late September and late October over 1,500 $m^2$ of habitat, including 1,200 $m^2$ in the South Side Channel, 300 $m^2$in the South Side Channel Spur Extension, and three 12 m long seines in the East Side Channel. In total, 587 fish were captured, including four in the East Side Channel, 115 in the South Side Channel, and 468 in the South Side Channel Spur Extension. None of the fish captured were indicator species.

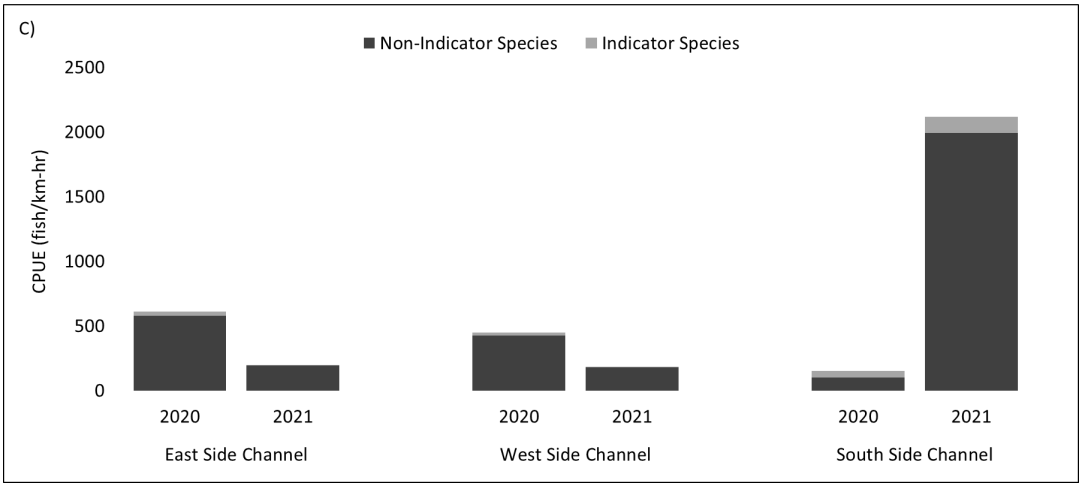
#### 4.2.5. Catch by Year

Preliminary figures were generated to compare the CPUE of indicator and non-indicator species for the three electrofishing methods in each offset channel by year (2020 and 2021). Monitoring shows continued fish use of the Side Channel Site 108R habitats, with some differences present between years and between methods. Further analysis of between year trends is planned for Year 3 reporting.

**Figure 12.** **Catch per unit effort (CPUE) for indicator and non-indicator species by offset location, for Year 1 and Year 2 of Side Channel Site 108R OEM, for a) small-fish boat electroshocking, b) large-fish boat electroshocking, and c) backpack electrofishing.**



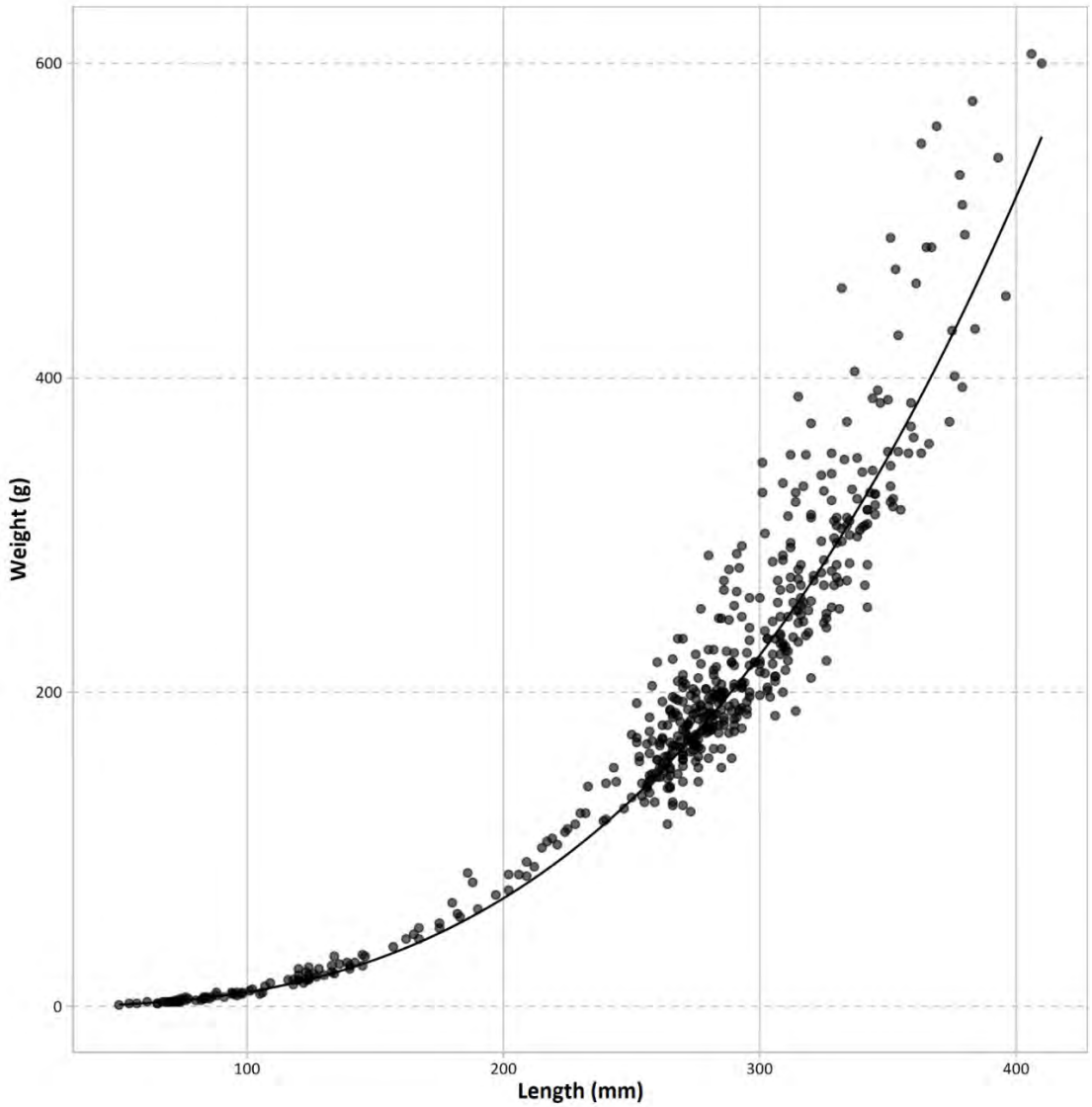



## 4.3. Individual Fish Metrics

### 4.3.1. Length-Weight Relationship

Out of the indicator species, Mountain Whitefish had a substantially higher catch which allowed the length-weight relationship to be plotted, and for condition factor to be calculated. The length-weight relationship indicates that in 2021 the Mountain Whitefish catch was dominated by adults sized from 250 – 350 mm FL, although smaller individuals were captured as well (Figure 13). In individuals smaller than 250 mm FL there is little variation in the relationship between length and weight, but above 250 mm FL variation is more obvious.

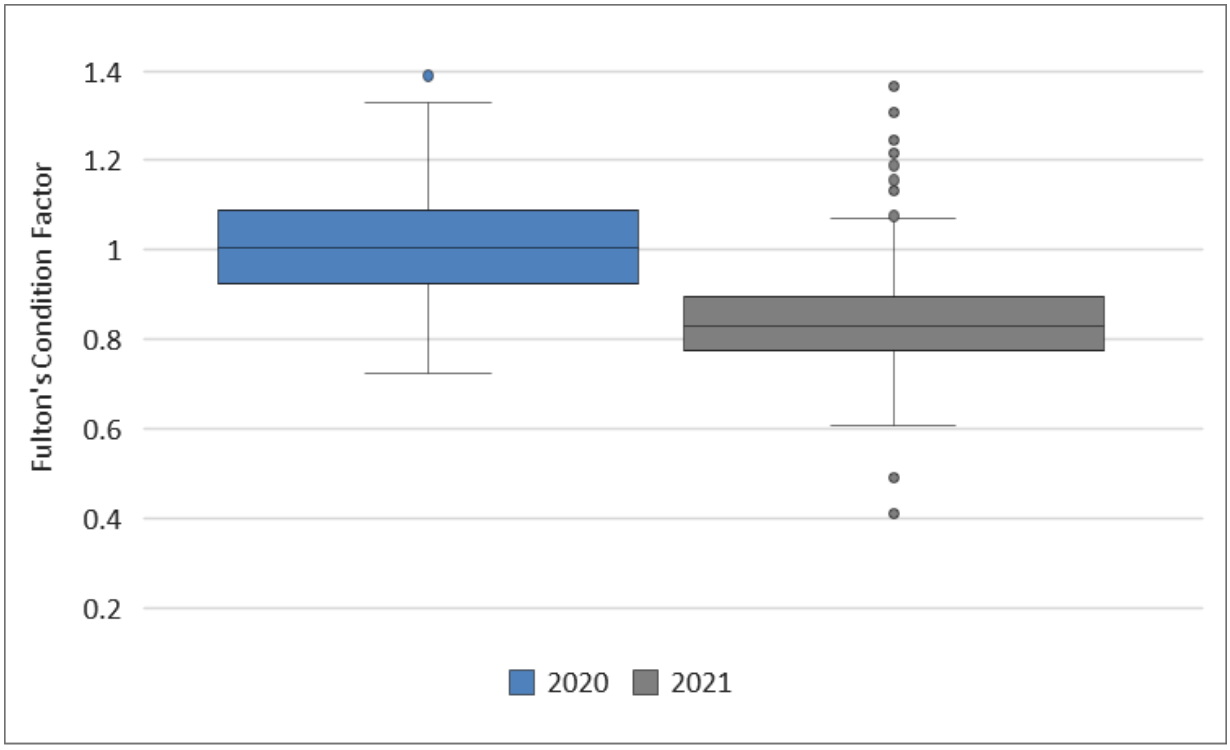
**Figure 13. Length-weight relationship for Mountain Whitefish captured within Side Channel Site 108R in 2021.**



### 4.3.2. Condition Factor

Body condition (Fulton's Condition Factor (K)) was calculated for the two years of study for Mountain Whitefish. Too few individuals of other species were captured to calculate a condition factor. Analysis of between year trends is planned for Year 3 reporting.

**Figure 14. Condition factor for Mountain Whitefish captured in 2020 and 2021.**




### 4.3.3. Length Frequency

Length frequency histograms were generated for fish caught using electrofishing (backpack and small and large boat electrofishing combined; Figure 15, Figure 16 and Figure 17). The catch of Mountain Whitefish was biased larger individuals (i.e., ≥250 mm), with individuals under 250 mm less common. This is likely due to the methods used; the catch was predominately made via boat electroshocking, which tends to be biased towards larger bodied individuals that inhabit deeper water that boats can access.

Among other indicator species with individuals captured, Bull Trout and Walleye only had size ranges representative of adult fish captured. Burbot were captured more abundantly in sizes representative of juveniles, with only one individual above 200 mm FL. A single large adult Rainbow Trout was also captured. Among non-indicator species, a variety of life stages were present for each sucker species, whereas life stages cannot be discerned for other species.

**Figure 15.** Length frequency histogram for Mountain Whitefish captured via electrofishing within Side Channel Site 108R in 2021.

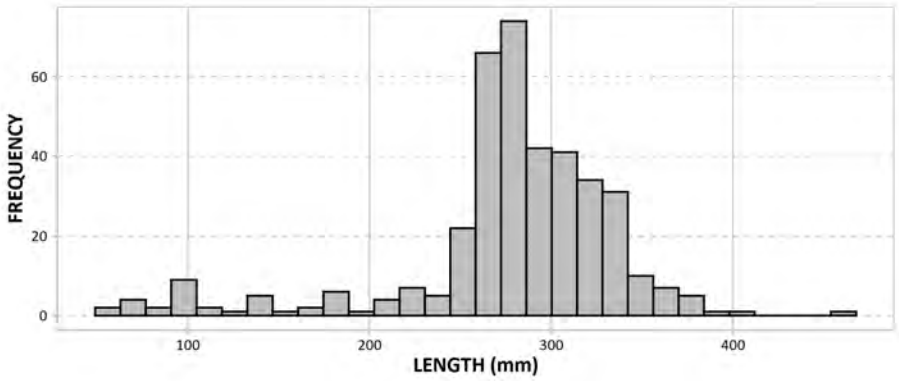



**Figure 16.** Length frequency histograms for indicator species (excluding Mountain Whitefish) captured in Side Channel Site 108R in 2021 (Mountain Whitefish displayed separately).

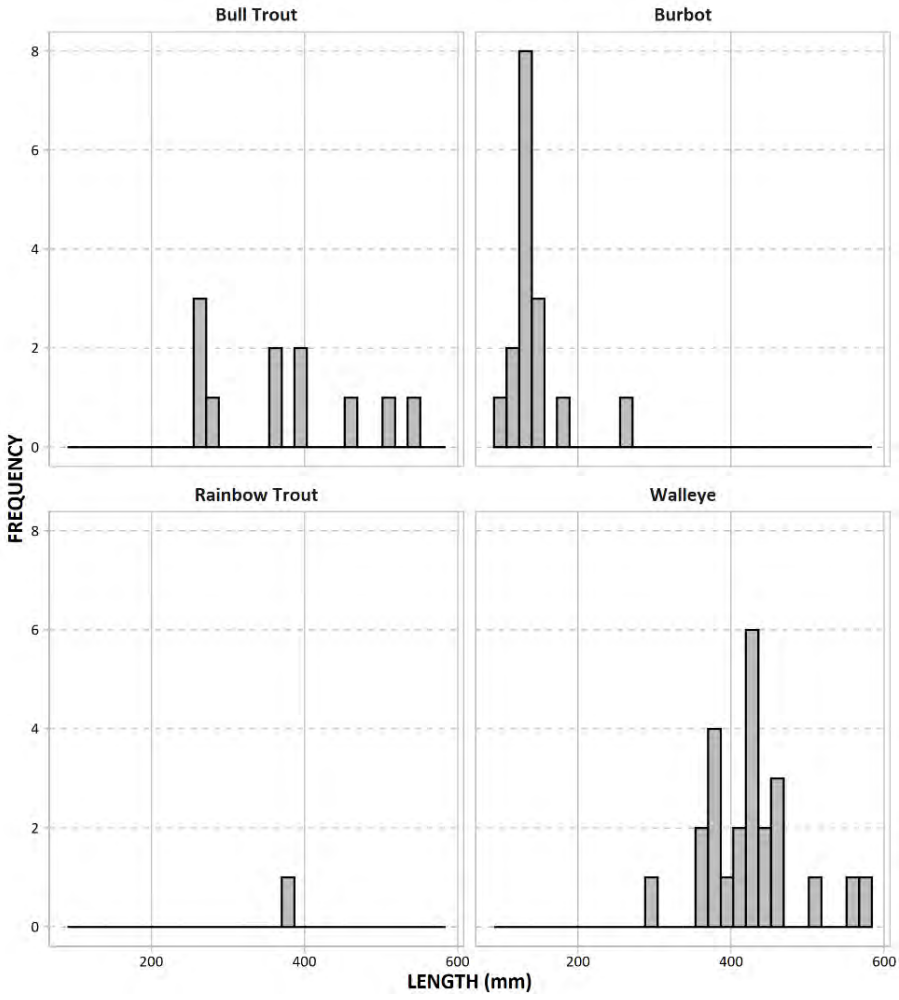
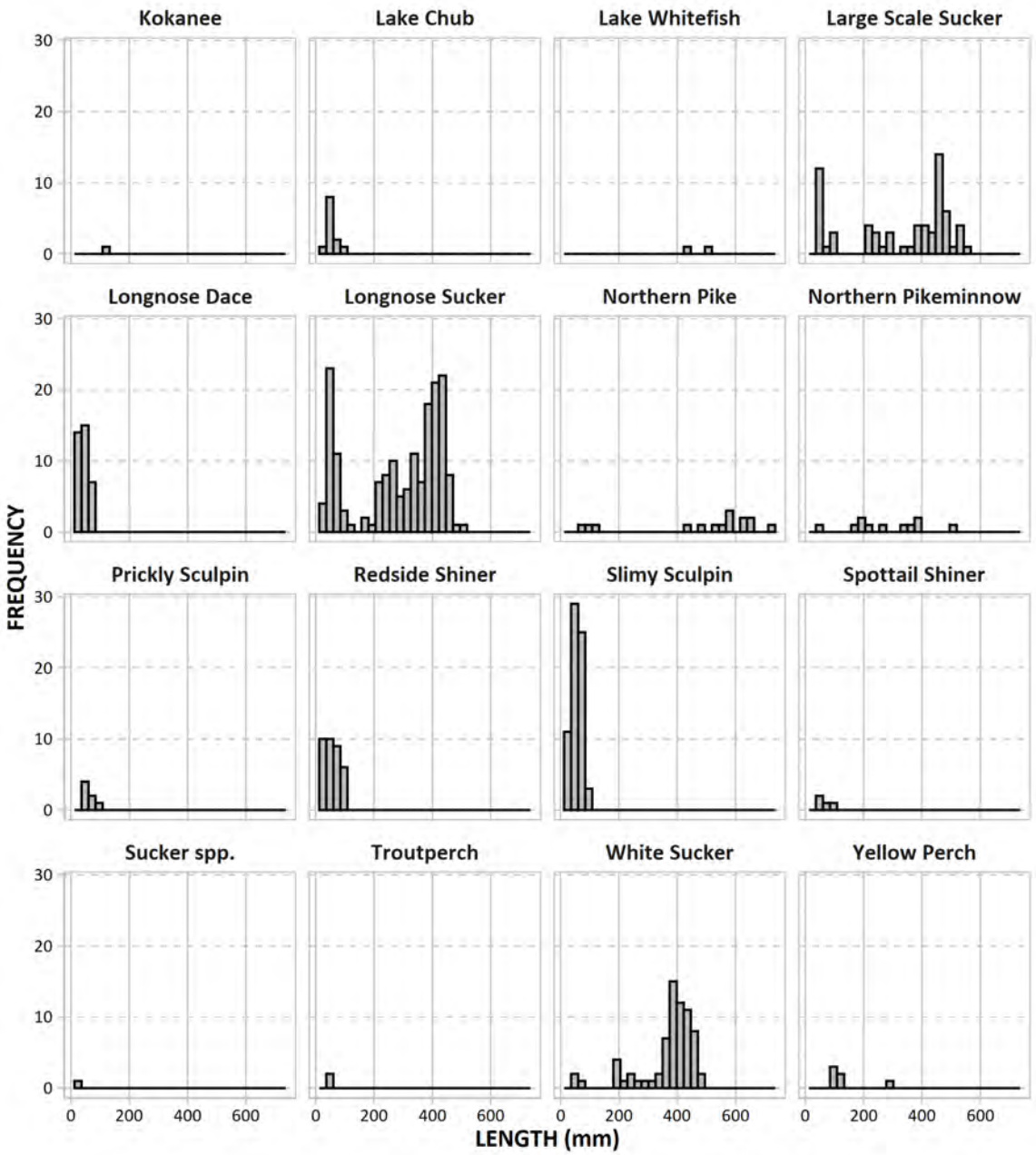


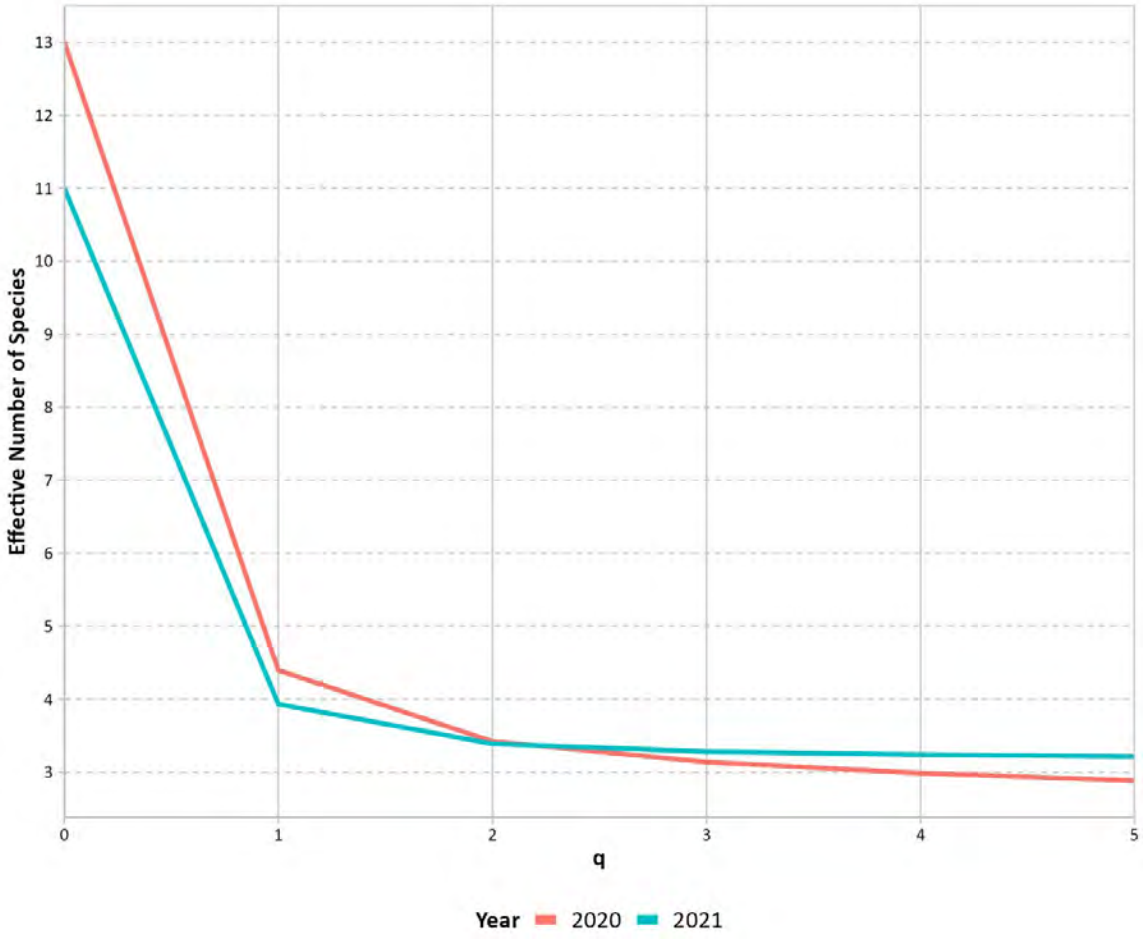
**Figure 17. Length frequency histograms for non-indicator species captured in Side Channel Site 108R in 2021.**




4.3.4. Diversity Profiles

A diversity profile was used to examine species diversity in Years 1 and 2. Diversity profiles for Site 108R indicate a decline in the effective number of species with increasing values of q, indicating that a few fish species dominate the catch (Figure 18).

**Figure 18. Comparison of diversity metrics between Years 1 and 2, for all fish captured.**




## 5. DISCUSSION

This report describes the second year of Offset Effectiveness Monitoring (OEM) conducted in the late summer and fall of 2021 at the offset area Side Channel Site 108R. The offset area is a large addition of constructed and enhanced aquatic habitat downstream of the Site C Clean Energy Project, designed to provide additional fish habitat to offset the effects of dam construction and site preparation. This study includes effectiveness monitoring of physical habitat attributes and fish use of the offsetting habitats. Overall, the modified and constructed habitats provide new, high-quality fish habitat, as indicated by channel morphology, habitat suitability, and habitat use results.

### 5.1. Physical Habitat Sampling

#### 5.1.1. Longitudinal Bed Profiles

Results of the longitudinal bed profiles show most sections of the offset channels have preserved as-built conditions as planned, though certain sections have been affected by instances of channel degradation. The comparison of longitudinal bed profiles with NHC's as-built surveys (NHC 2020)

showed changes for portions the East, West, and Main Channel, while the Backwater Channel and the South Side Channel Spur Extension matched the as-built more closely (Figure 5 to Figure 9). The deviations from as-built surveys were notable when comparing the 2020 and 2021 bed profiles, i.e., bedform changes continued for the East, West and Main Channel between 2020 and 2021.

While some changes in bed profiles can be attributed to measurement inaccuracies, the major changes are due to geomorphic processes (erosion and aggradation), which are suspected to be driven by high flows in the Peace River in 2020 and 2021. Changes in bed profile at high flows (2,500 $m^3/s$) in the East and West Channel were also predicted by NHC's morphodynamic modelling (NHC 2016), which assumed easily erodible substrate may be shifted ($D_{50}$ = 10 mm).

Many of the morphological features included described in the as-built surveys remain, indicating that fish habitat is for the most part provided as intended in the design. A point of concern is that deviations from the as-built have occurred at the inlet or outlet of some offset locations (i.e., the East and West Side Channels, and Main Channel Bar), which may affect flow patterns in the adjacent habitats. In the case of the East Side Channel, aggradation at the inlet led to a loss of connectivity at low flows, and channel drying. Though this likely only occurs at extreme low flows, it illustrates the possibility of changes in bedform over time that could be detrimental to the objectives of the offsetting program (i.e., that the offsets maintain their design and purpose over time).

#### 5.1.2. Weighted Usable Habitat

Habitat suitability results indicate that Side Channel Site 108R continues to provide a large area of high quality functional aquatic habitat. A diversity of habitats is provided by the range of depths, velocities, and substrate compositions within Side Channel Site 108R. In general, the offset habitats are providing suitable habitat for indicator species (i.e., Arctic Grayling, Mountain Whitefish, Rainbow Trout, and Walleye), and represent many thousand square meters of fish habitat that were not previously usable downstream of Site C.

More specifically, WUA and usability calculations (Section 4.1.3;) suggested that all indicator species had substantial usable habitat within the different offset locations of Side Channel Site 108R. Species and life stages that prefer slower, deeper water (i.e., juvenile and adult Arctic Grayling, juvenile and adult Mountain Whitefish, Walleye) have suitable habitat in the Backwater Channel and the South Side Channel Spur Extension. Among species/life stages that prefer moderate velocity in shallower water (i.e., juvenile/adult Rainbow Trout), the West Side Channel and the East Side Channel were the preferred habitat. Despite some changes due to aggradation, these offset locations continue to provide large areas of highly usable habitat, supporting the objective that the offset locations maintain their design and purpose over time.

#### 5.1.3. Substrate and Channel Morphology

Surveys of substrate, large woody debris, and vegetation indicate that for the most part, these additional components of fish habitat are performing as expected. Gravel and cobbles dominated the

higher velocity locations (i.e., the West and East Side Channels, and the Main Channel Bar) while low velocity locations (i.e., the Backwater Channel and the South Side Channel Spur Extension) featured abundant fine sediment. Aquatic vegetation was observed in the Backwater Channel; however, other channels appear to remain unvegetated. Submerged root wads and debris catcher pilings were intact. Channel widening may continue in locations where banks have sloughed, particularly in the East and West Side Channels.

Overall, the variety of substrates found in the different offset locations offer suitable habitat for fish. The abundance of cobble offers rich interstitial spaces for juvenile fish, however, some fine sediment accumulation in slow velocity habitats may infill those spaces. The large woody debris and debris catchers have withstood high flows and continue to provide quality cover for juvenile fish. Colonization by vegetation has only been evident in the Backwater Channel, but less macrophyte growth would be expected at other offset locations with higher velocities and substrate dominated by gravel and cobble. These habitat factors are functioning as designed, however, continued bank sloughing and channel widening in the East and West Side Channels may affect the quality of fish habitat in adjacent habitats at low flows.

### 5.2. Fish Community

Fish habitat use data collected in Year 2 indicates that the enhanced and constructed habitats are being used by some but not all the Indicator Species. Of the indicator species, Mountain Whitefish had the highest catch in the offsetting habitats, Walleye were present in lower numbers, while a single capture of Rainbow Trout and no captures of Arctic Grayling were recorded. The absence of Rainbow Trout and Arctic Grayling are likely a function of the overall abundance of these species in the area surrounding Side Channel Site 108R. In the Peace River near 108R the 2020 Peace River Large Fish Indexing Program reported only 4 Rainbow Trout and 6 Arctic Grayling in (Golder 2021), while the Peace River Composition and Abundance Survey reported 10 Arctic Grayling and 3 Rainbow Trout (Triton 2021). Without a large source population surrounding the site, colonization by these species may take place slowly, despite available high-quality habitat. Mountain Whitefish were the most abundance indicator species captured in the above studies, and their presence in the offset areas indicate that the Peace River population is expanding into the newly wetted (or enhanced) areas as planned (BC Hydro 2015a).

Overall, non-indicator species were a larger portion of the catch than indicator species, making up 75% of the total catch. Though not considered target species, these groups nonetheless represent important parts of the aquatic ecosystem. Their continued presence in the offset locations supports the objective of creating a biologically effective offset that supports ongoing productivity.

## 6. CONCLUSION

This report represents Year 2 of offset environmental monitoring at Side Channel Site 108R. Physical features of Side Channel Site 108R, and the fish community were monitored. Modelled results of

habitat suitability show offsetting is providing habitat for the indicator species it was designed for. The longitudinal bed profiles and ADCP transects show for the most part the channels are maintaining their form, with some exceptions. Overall, the fish captures in 2021 suggest that fish continue to use habitat in Side Channel Site 108R. Of the indicator species, many Mountain Whitefish were captured, with fewer of the other indicator species encountered. Further monitoring is planned to occur in 2022 (Year 3). Recommendations for the Year 3 study can be found in a separate recommendations memo (Whelan and Sherstone 2022).

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## PROJECT MAPS

631500 632000 632500 633000 633500

6229500 6229000 6228500 6228000

N

Peace River

Main Channel Bar

GMP01 GMP02 GMP03 GMP04

GME01 GME02 GME03 GME04 GME05

East Side Channel

South Side Channel

South Side Channel Spur Extension

West Side Channel

Backwater Channel

GMW01 GMW02 GMW03 GMW04 GMW05 GMW06 GMW07 GMW08

GMS01 GMS02 GMS03 GMS04

GMB01 GMB02 GMB03 GMB04 GMB05

631500 632000 632500 633000 633500

SITE C OFFSET EFFECTIVENESS MONITORING

# Site 108R
# Physical Habitat Sampling

**Legend**

- High Priority Transects
- Low Priority Transects
- Longitudinal Survey


MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES

0 50 100 200 300 400 m

Scale: 1:8,500

| NO. | DATE | REVISION | BY |
|---|---|---|---|
| 1 | 2021-04-28 | 1200_STC_Site108R_PhysicalHabitatSampling_4052_20210129 | EEC |
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Date Saved: 2021-04-28
Coordinate System: NAD 1983 UTM Zone 10N

ECOFISH RESEARCH

Map 2

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631500 632000 632500 633000 633500

6229500 6229000 6228500 6228000

Peace River
Main Channel Bar
East Side Channel
South Side Channel
South Side Channel Spur Extension
West Side Channel
Backwater Channel

PCR-OCES12
PCR-OCES13
PCR-OCSD-MH3.05
PCR-OCSD-MH3.09
OEM-USC
PCR-OCMT08
PCR-BP01
PCR-OCMT09
PCR-OCHT01
PCR-OCMT01
PCR-BS01
PCR-OCSD-MH3.10
PCR-OCMT02
PCR-OCHT02
PCR-OCEF02
PCR-OCMT05
PCR-OCHT04
PCR-OCES03
PCR-OCES04
PCR-OCGN02
PCR-OCSD-RR107.4
PCR-SB07
PCR-OCSD-MH3.08
PCR-OCHT05
PCR-OCES06
PCR-OCES05
PCR-OCMT11
PCR-OCMT10
PCR-BS02
PCR-OCMT06
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PCR-OCES10
PCR-BS0504
PCR-OCES02
PCR-OCSD-MH3.04
PCR-OCES11
PCR-OCSD-MH3.06
PCR-OCES07
PCR-OCES08
OEM-DSC
PCR-BP03
PCR-OCEF03
PCR-OCMT03
PCR-OCHT03
PCR-OCMT04
PCR-GN0501
PCR-OCSD-MH1.01
PCR-BS503
PCR-BS03
PCR-OCES01
PCR-OCEF01
PCR-OCGN01
PCR-OCMT07
PCR-OCSD-MH3.11
OEM-MS

N

631500 632000 632500 633000 633500

6229500 6229000 6228500 6228000

SITE C OFFSET EFFECTIVENESS MONITORING

# Site 108R
# Fish Sampling

**Legend**

**Fish Sampling**

- Minnow Traps (MT, HT)
- Gill Netting (GN)
- Electrofishing (EF, BP)
- Stranding Site (SD)
- Beach Seine (BS)
- Small Boat Electrofishing (SB, ES)
- Large Boat Electrofishing (OEM)


MAP SHOULD NOT BE USED FOR LEGAL OR NAVIGATIONAL PURPOSES

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Scale: 1:8,500

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Coordinate System: NAD 1983 UTM Zone 10N

ECOFISH RESEARCH

Map 3

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a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (883 $m^3/s$).

**Figure 3. Looking RL-RR at transect GMS02.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (883 $m^3/s$).

**Figure 4. Looking RR-RL at transect GMS02.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (883 $m^3/s$).

**Figure 5. Looking upstream at transect GMS03.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (893 $m^3/s$).

**Figure 6. Looking downstream at transect GMS03.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (893 $m^3/s$).

**Figure 7. Looking RL-RR at transect GMS03.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (893 $m^3/s$).

**Figure 8. Looking RR-RL at transect GMS03.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (893 $m^3/s$).

**Figure 9. Looking upstream at transect GMS04.**

a) August 5, 2021 (743 $m^3/s$).

b) October 2, 2021 (916 $m^3/s$).

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a) August 5, 2021 (743 $m^3/s$).

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a) August 5, 2021 (743 $m^3/s$).

**Figure 12. Looking RR-RL at transect GMS04.**

a) August 5, 2021 (743 $m^3/s$).

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**Figure 13. Looking upstream at transect GME01.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021.

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a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021.

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a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021.

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a) August 6, 2021 (743 $m^3/s$).

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a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (1100 $m^3/s$).

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a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (1100 $m^3/s$).

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a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (1100 $m^3/s$).

**Figure 20. Looking RR-RL at transect GME02.**

a) August 6, 2021 (743 $m^3/s$).

**Figure 21. Looking upstream at transect GME03.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (903 $m^3/s$).

**Figure 22. Looking downstream at transect GME03.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (903 $m^3/s$).

**Figure 23. Looking RL-RR at transect GME03.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (903 $m^3/s$).

**Figure 24. Looking RR-RL at transect GME03.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (903 $m^3/s$).

## 3. WEST SIDE CHANNEL

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a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 26. Looking downstream at transect GMW01.**

a) August 6, 2021 (743 $m^3/s$).

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a) August 6, 2021 (743 $m^3/s$).

**Figure 28. Looking RR-RL at transect GMW01.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 29. Looking upstream at transect GMW02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 30. Looking downstream at transect GMW02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 31. Looking RL-RR at transect GMW02.**

a) August 6, 2021 (743 $m^3/s$).

**Figure 32. Looking RR-RL at transect GMW02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 33. Looking upstream at transect GMW05.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 34. Looking downstream at transect GMW05.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 35. Looking RL-RR at transect GMW05.**

a) August 6, 2021 (743 $m^3/s$).

**Figure 36. Looking RR-RL at transect GMW05.**

a) August 6, 2021 (743 $m^3/s$).

b) October 2, 2021.

**Figure 37. Looking upstream at transect GMW08.**

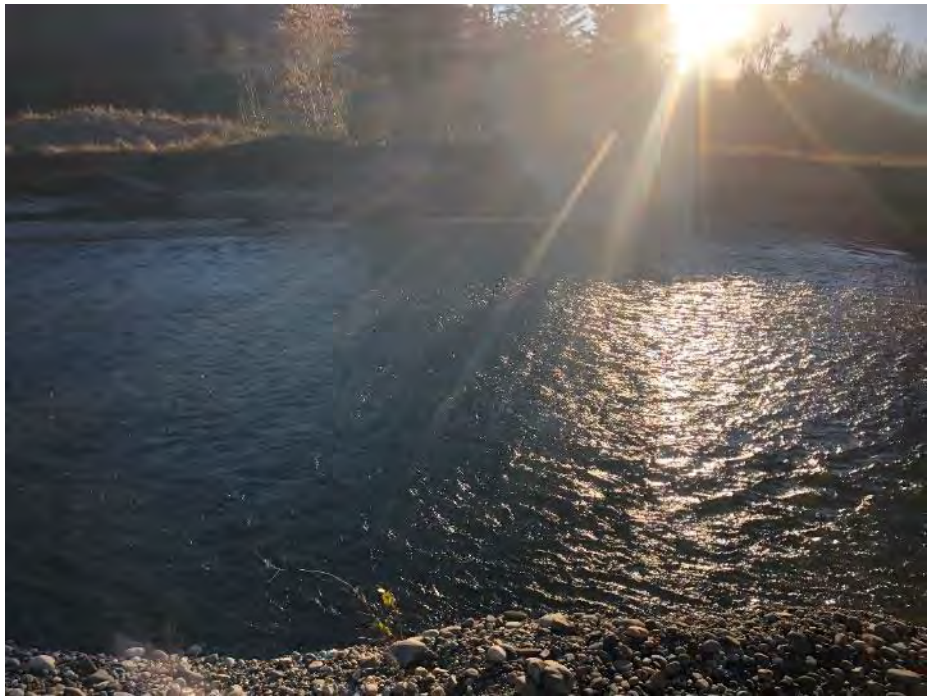
a) October 2, 2021.

**Figure 38. Looking downstream at transect GMW08.**

a) October 2, 2021.

**Figure 39. Looking RL-RR at transect GMW08.**

a) October 2, 2021.



## 4. MAIN CHANNEL BAR

**Figure 40. Looking upstream at transect GMP02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (865 $m^3/s$).

**Figure 41. Looking downstream at transect GMP02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (865 $m^3/s$).

**Figure 42. Looking RR-RL at transect GMP02.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (865 $m^3/s$).

**Figure 43. Looking upstream at transect GMP04.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (900 $m^3/s$).

**Figure 44. Looking RR-RL at transect GMP04.**

a) August 6, 2021 (743 $m^3/s$).

b) October 1, 2021 (900 $m^3/s$).

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**Figure 45. Looking upstream at transect GMB02.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (950 $m^3/s$).

**Figure 46. Looking downstream at transect GMB02.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (950 $m^3/s$).

**Figure 47. Looking RL-RR at transect GMB02.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (950 $m^3/s$).

**Figure 48. Looking RR-RL at transect GMB02.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (950 $m^3/s$).

**Figure 49. Looking upstream at transect GMB03.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (943 $m^3/s$).

**Figure 50. Looking downstream at transect GMB03.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (943 $m^3/s$).

**Figure 51. Looking RL-RR at transect GMB03.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (943 $m^3/s$).

**Figure 52. Looking RR-RL at transect GMB03.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (943 $m^3/s$).

**Figure 53. Looking upstream at transect GMB05.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (934 $m^3/s$).

**Figure 54. Looking downstream at transect GMB05.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (934 $m^3/s$).

**Figure 55. Looking RL-RR at transect GMB05.**

a) August 4, 2021 (743 $m^3/s$).

**Figure 56. Looking RR-RL at transect GMB05.**

a) August 4, 2021 (743 $m^3/s$).

b) October 2, 2021 (934 $m^3/s$).

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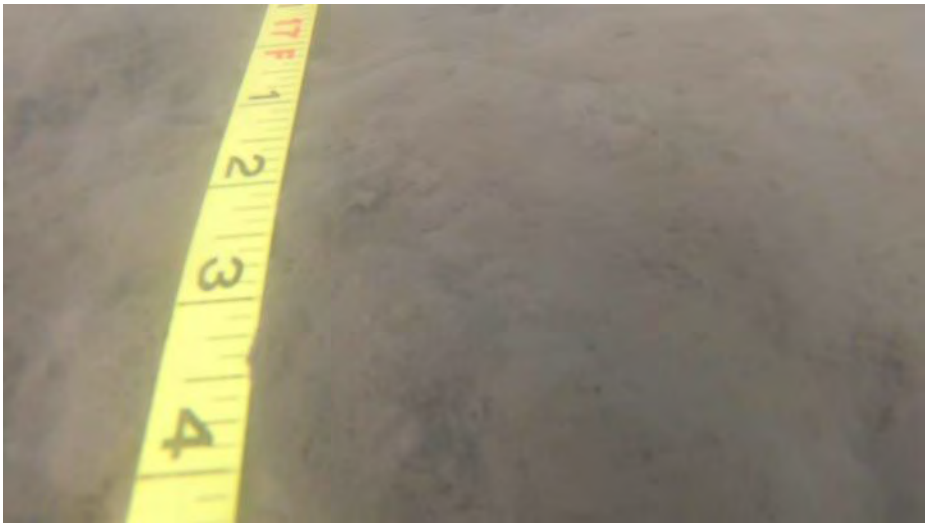

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**Table 1. Summary of site conditions and sampling effort from minnow trap and hoop trap sampling in the Peace River in August - October 2021.**

| Channel | Site[1] | Date Set | Time Set (hh:mm) | Date Pulled | Pulled (hh:mm) | Discharge ($m^3/s$) | Depth (m) | Effort (Hours) |
|---|---|---|---|---|---|---|---|---|
| Backwater Channel | PCR-OCMT12 | 4-Aug-2021 | 10:16 | 5-Aug-2021 | 9:59 | 748 | 2 | 22.73 |
| | | 25-Oct-2021 | 15:37 | 26-Oct-2021 | 12:38 | 823 | 1 | 21.02 |
| | PCR-OCMT13 | 4-Aug-2021 | 10:19 | 5-Aug-2021 | 10:05 | 748 | 1.5 | 22.67 |
| | | | 15:15 | 26-Oct-2021 | 12:26 | 823 | 0.6 | 21.18 |
| | PCR-OCMT14 | 4-Aug-2021 | 10:57 | 5-Aug-2021 | 10:40 | 748 | 1.5 | 23.02 |
| | | | 15:00 | 26-Oct-2021 | 12:18 | 823 | 1 | 21.3 |
| | | | | | | | **Channel Total** | 131.92 |
| East Side Channel | PCR-OCHT03 | 4-Aug-2021 | 10:10 | 5-Aug-2021 | 14:45 | 748 | 0.6 | 23.17 |
| | PCR-OCHT06 | 4-Aug-2021 | 9:43 | 5-Aug-2021 | 14:32 | 748 | 1.6 | 22.6 |
| | PCR-OCMT03 | 4-Aug-2021 | 15:32 | 5-Aug-2021 | 14:58 | 748 | 0.5 | 23.43 |
| | | | 13:52 | 26-Oct-2021 | 12:44 | 823 | n/c | 22.87 |
| | PCR-OCMT04 | 4-Aug-2021 | 15:30 | 5-Aug-2021 | 14:43 | 748 | 0.65 | 23.22 |
| | | | 13:49 | 26-Oct-2021 | 12:40 | 823 | n/c | 22.85 |
| | | | | | | | **Channel Total** | 138.14 |
| South Side Channel Spur Extension | PCR-OCMT06 | 25-Oct-2021 | 14:14 | 26-Oct-2021 | 12:12 | 823 | n/c | 21.97 |
| | PCR-OCMT10 | 4-Aug-2021 | 14:42 | 5-Aug-2021 | 11:30 | 748 | 0.85 | 20.8 |
| | | | 14:19 | 26-Oct-2021 | 12:17 | 823 | n/c | 21.97 |
| | PCR-OCMT11 | 4-Aug-2021 | 14:28 | 5-Aug-2021 | 11:41 | 748 | 0.75 | 21.22 |
| | | | 14:19 | 26-Oct-2021 | 12:21 | 823 | n/c | 22.03 |
| | PCR-OCMT16 | 4-Aug-2021 | 13:57 | 5-Aug-2021 | 11:57 | 748 | 1.1 | 22 |
| | | | 14:28 | 26-Oct-2021 | 12:27 | 823 | n/c | 21.98 |
| | PCR-OCMT17 | 4-Aug-2021 | 14:16 | 5-Aug-2021 | 11:46 | 748 | 0.85 | 21.5 |
| | | | 14:24 | 26-Oct-2021 | 12:24 | 823 | n/c | 22 |
| | PCR-OCMT18 | 25-Oct-2021 | 14:41 | 26-Oct-2021 | 12:10 | 823 | n/c | 21.48 |
| | PCR-OCMT19 | 4-Aug-2021 | 16:08 | 5-Aug-2021 | 12:48 | 748 | 1 | 21.88 |
| | | | 14:06 | 26-Oct-2021 | 12:07 | 823 | n/c | 22.02 |
| | | | | | | | **Channel Total** | 260.85 |
| West Side Channel | PCR-OCHT02 | 4-Aug-2021 | 9:39 | 5-Aug-2021 | 12:12 | 748 | 0.35 | 23.05 |
| | PCR-OCMT01 | 4-Aug-2021 | 16:07 | 5-Aug-2021 | 11:58 | 748 | 0.45 | 22.38 |
| | | | 13:10 | 26-Oct-2021 | 11:12 | 823 | 1.2 | 22.03 |
| | PCR-OCMT02 | 4-Aug-2021 | 16:04 | 5-Aug-2021 | 12:06 | 748 | 0.5 | 22.82 |
| | | | 13:00 | 26-Oct-2021 | 11:22 | 823 | 0.7 | 22.37 |
| | PCR-OCMT05 | 4-Aug-2021 | 11:03 | 5-Aug-2021 | 10:49 | 748 | 0.5 | 22.93 |
| | | 4-Aug-2021 | | 5-Aug-2021 | | 748 | 1 | 22.92 |
| | | 25-Oct-2021 | 14:42 | 26-Oct-2021 | 11:58 | 823 | 0.4 | 21.27 |
| | PCR-OCMT08 | 4-Aug-2021 | 14:10 | 5-Aug-2021 | 11:29 | 748 | 1.2 | 22.1 |
| | | 4-Aug-2021 | | 5-Aug-2021 | | 748 | 1.2 | 22.02 |
| | | 25-Oct-2021 | 13:30 | 26-Oct-2021 | 11:04 | 823 | 1 | 21.57 |
| | PCR-OCMT09 | 4-Aug-2021 | 14:04 | 5-Aug-2021 | 11:48 | 748 | 1.2 | 22.72 |
| | | | 13:21 | 26-Oct-2021 | 10:59 | 823 | 1.5 | 21.63 |
| | PCR-OCMT15 | 25-Oct-2021 | 16:02 | 26-Oct-2021 | 13:00 | 823 | 0.4 | 20.97 |
| | | | | | | | **Channel Total** | **310.78** |
| | | | | | | | **Grand-Total** | **841.7** |

[1] Sites ending in "MT" refers to minnow traps, "HT" refers to hoop traps.

**Table 2. Summary of site conditions and sampling effort from beach seine sampling in the Peace River in September and October 2021.**

| Channel | Site | Date | Average Daily Discharge ($m^3/s$) | Water Temp. (°C) | Estimated Visibility (m) | Haul # | Time In (hh:mm) | Time Out (hh:mm) | Site Length (m) | Site Area ($m^2$) |
|---|---|---|---|---|---|---|---|---|---|---|
| East Side Channel | PCR-BS03 | 26-Oct-2021 | 812 | n/c | n/c | 1 | 11:18 | 11:19 | 12 | n/c |
| | | | | n/c | n/c | 2 | 11:26 | 11:27 | 12 | n/c |
| | | | | n/c | n/c | 3 | 11:33 | 11:34 | 12 | n/c |
| | | | | | | | | **Channel Total** | **36** | **n/c** |
| South Side Channel | PCR-BS01 | 26-Sep-2021 | 1,012 | 12.1 | 1.3 | 1 | 9:39 | 9:41 | 25 | 100 |
| | | | | 12.1 | 1.2 | 2 | 9:35 | 9:36 | 25 | 100 |
| | | | | 12.1 | 1.4 | 3 | 9:43 | 9:46 | 25 | 100 |
| | PCR-BS03 | 26-Sep-2021 | 1,012 | 12.0 | 1.3 | 1 | 14:10 | 14:11 | 25 | 100 |
| | | | | 12.0 | 1.2 | 2 | 14:15 | 14:17 | 25 | 100 |
| | | | | 12.0 | 1.2 | 3 | 14:04 | 14:05 | 25 | 100 |
| | PCR-BS0504 | 26-Sep-2021 | 1,012 | 12.1 | 1.2 | 1 | 10:10 | 10:12 | 25 | 100 |
| | | | | 12.1 | 1.2 | 2 | 10:16 | 10:17 | 25 | 100 |
| | | | | 12.1 | 1.4 | 3 | 10:19 | 10:21 | 25 | 100 |
| | PCR-BS503 | 26-Sep-2021 | 1,012 | 12.0 | 1.2 | 1 | 16:04 | 16:05 | 25 | 100 |
| | | | | 12.0 | 1.2 | 2 | 16:07 | 16:08 | 25 | 100 |
| | | | | 12.0 | 1.2 | 3 | 16:08 | 16:09 | 25 | 100 |
| | | | | | | | | **Channel Total** | **372** | **1200** |
| South Side Channel Spur Extension | PCR-BS02 | 26-Sep-2021 | 1,012 | 12.1 | 1.0 | 1 | 10:57 | 11:02 | 25 | 100 |
| | | | | 12.1 | 1.0 | 2 | 11:03 | 11:05 | 25 | 100 |
| | | | | 12.1 | 1.0 | 3 | 11:11 | 11:12 | 25 | 100 |
| | | | | | | | | **Channel Total** | **75** | **300** |
| | | | | | | | | **Grand Total** | **483** | **1,500** |

**Table 3. Summary of site conditions and sampling effort from gillnet sampling in the Peace River in August - October 2021.**

| Channel | Site | Daily Average Discharge ($m^3/s$) | Date | Effort (Hours)[1] |
|---|---|---|---|---|
| South Side Channel | PCR-GN0501 | 812 | 26-Oct-2021 | 2.0 |
| | | 1,012 | 26-Sep-2021 | 2.3 |
| | PCR-OCGN01 | 812 | 26-Oct-2021 | 2.1 |
| | | | **Total** | **6.5** |

[1]All gillnet sets were conducted with a net composed of 38 mm, 64 mm, and 89 mm panels

**Table 4. Summary of fish capture from minnow trap and hoop trap sampling in the Peace River in August - October 2021.**

| Channel | Site | Method[1] | Date | Species | Number Captured |
|---|---|---|---|---|---|
| South Side Channel Spur Extension | PCR-OCMT06 | MT | 25-Oct-2021 | Longnose Sucker | 1 |
| | PCR-OCMT10 | MT | 25-Oct-2021 | Large Scale Sucker | 1 |
| | | | | Longnose Sucker | 1 |
| | | | | **Channel Total** | 3 |
| West Side Channel | PCR-OCMT08 | MT | 4-Aug-2021 | Longnose Sucker | 1 |
| | | | | **Channel Total** | **1** |
| | | | | **Grand Total** | **4** |

[1] MT = Minnow Trap

**Table 5. Summary of fish capture from beach seine sampling in the Peace River in October 2021.**

| Channel | Site | Date | Common Name | Number Captured |
|---|---|---|---|---|
| East Side Channel | PCR-BS03 | 26-Oct-2021 | Longnose Dace | 1 |
| | | | Longnose Sucker | 2 |
| | | | Slimy Sculpin | 1 |
| | | | **Channel Total** | 4 |
| South Side Channel | PCR-BS03 | 26-Sep-2021 | Longnose Dace | 20 |
| | | | Redside Shiner | 11 |
| | | | Slimy Sculpin | 1 |
| | | | Sucker spp. | 49 |
| | | | Unknown | 32 |
| | PCR-BS0504 | 26-Sep-2021 | Redside Shiner | 1 |
| | PCR-BS503 | 26-Sep-2021 | Redside Shiner | 1 |
| | | | **Channel Total** | 115 |
| South Side Channel Spur Extension | PCR-BS02 | 26-Sep-2021 | Longnose Dace | 1 |
| | | | Northern Pikeminnow | 1 |
| | | | Redside Shiner | 136 |
| | | | Spottail Shiner | 1 |
| | | | Sucker spp. | 149 |
| | | | White Sucker | 1 |
| | | | Cyprinid spp. | 2 |
| | | | Unknown | 177 |
| | | | **Channel Total** | **468** |
| | | | **Grand Total** | **587** |

**Table 6. Summary of fish capture from gill net sampling in the Peace River in August - October 2021.**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| East Side Channel | PCR-GN0501 | 26-Sep-2021 | Large Scale Sucker | ≥300 | **4** |
| | | | Longnose Sucker | ≥300 | **14** |
| | | | Northern Pike | ≥300 | **4** |
| | | | White Sucker | ≥300 | **1** |
| | | 26-Oct-2021 | Longnose Sucker | ≥300 | **3** |
| | | | Mountain Whitefish | 200-299 | **1** |
| | | | | **Channel Total** | **27** |
| South Side Channel | PCR-OCGN01 | 26-Oct-2021 | Mountain Whitefish | 200-299 | **1** |
| | | | White Sucker | 200-299 | **1** |
| | | | | **Channel Total** | **2** |
| | | | | **Grand Total** | **29** |

**Table 7. Summary of fish capture from small boat electrofishing sampling in the Peace River in August - October 2021.**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| Backwater Channel | PCR-OCES03 | 4-Aug-2021 | Walleye | ≥300 | 3 |
| | | | White Sucker | ≥300 | 2 |
| | | | Yellow Perch | ≤150 | 1 |
| | | | | **Site Total** | **6** |
| | PCR-OCES04 | 4-Aug-2021 | Northern Pike | ≥300 | 1 |
| | | | Walleye | ≥300 | 1 |
| | | | White Sucker | ≥300 | 2 |
| | | | Yellow Perch | ≤150 | 3 |
| | | 31-Oct-2021 | Burbot | 151-199 | 1 |
| | | | Mountain Whitefish | ≥300 | 2 |
| | | | Mountain Whitefish | 200-299 | 1 |
| | | | | **Site Total** | **11** |
| | PCR-SB07 | 4-Aug-2021 | Longnose Sucker | ≥300 | 1 |
| | | | Northern Pike | ≥300 | 2 |
| | | | Walleye | ≥300 | 3 |
| | | | White Sucker | ≥300 | 1 |
| | | | White Sucker | 200-299 | 1 |
| | | | Yellow Perch | ≤150 | 1 |
| | | 26-Sep-2021 | Longnose Sucker | ≤150 | 1 |
| | | | Longnose Sucker | ≥300 | 3 |
| | | | Mountain Whitefish | ≥300 | 1 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | Northern Pike | ≥300 | 1 |
| | | | Northern Pikeminnow | ≤150 | 1 |
| | | | White Sucker | ≤150 | 1 |
| | | | White Sucker | ≥300 | 1 |
| | | | | **Site Total** | **23** |
| | | | | **Area Total** | **40** |

**Table 7. Continued (2 of 5).**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| East Side Channel | PCR-OCES07 | 5-Aug-2021 | Mountain Whitefish | ≥300 | 7 |
| | | | Mountain Whitefish | 200-299 | 3 |
| | | 31-Oct-2021 | Longnose Sucker | ≤150 | 2 |
| | | | Mountain Whitefish | ≤150 | 1 |
| | | | Mountain Whitefish | 200-299 | 2 |
| | | | Redside Shiner | ≤150 | 2 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | | **Site Total** | **18** |
| | PCR-OCES08 | 5-Aug-2021 | Longnose Sucker | 151-199 | 1 |
| | | | Mountain Whitefish | ≤150 | 1 |
| | | | Mountain Whitefish | ≥300 | 5 |
| | | | Mountain Whitefish | 200-299 | 3 |
| | | 31-Oct-2021 | Longnose Sucker | ≤150 | 5 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | Redside Shiner | ≤150 | 9 |
| | | | Slimy Sculpin | ≤150 | 2 |
| | | | Troutperch | ≤150 | 1 |
| | | | | **Site Total** | **32** |
| | | | | **Area Total** | **50** |

**Table 7. Continued (3 of 5).**

| Area | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| South Side Channel | PCR-OCES01 | 5-Aug-2021 | White Sucker | 200-299 | 1 |
| | | 31-Oct-2021 | White Sucker | 200-299 | 1 |
| | | | | **Site Total** | **2** |
| | PCR-OCES09 | 5-Aug-2021 | White Sucker | ≥300 | 1 |
| | | | Bull Trout | ≥300 | 1 |
| | | | Large Scale Sucker | ≥300 | 1 |
| | | | Longnose Sucker | ≥300 | 1 |
| | | | Longnose Sucker | 200-299 | 2 |
| | | | Mountain Whitefish | ≤150 | 2 |
| | | | Redside Shiner | ≤150 | 1 |
| | | | Walleye | ≥300 | 1 |
| | | | White Sucker | ≥300 | 4 |
| | | | | **Site Total** | **14** |
| | PCR-OCES11 | 4-Aug-2021 | Burbot | ≤150 | 1 |
| | | | Kokanee | ≤150 | 1 |
| | | | Mountain Whitefish | ≥300 | 3 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | | **Site Total** | **10** |
| | | | | **Area Total** | **26** |

**Table 7. Continued (4 of 5).**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| South Side Channel Spur Extension | PCR-OCES05 | 5-Aug-2021 | Longnose Sucker | ≥300 | 2 |
| | | | Longnose Sucker | 200-299 | 1 |
| | | | Mountain Whitefish | ≥300 | 5 |
| | | | Mountain Whitefish | 200-299 | 3 |
| | | | White Sucker | ≥300 | 5 |
| | | | White Sucker | 200-299 | 1 |
| | | | White Sucker | n/c | 1 |
| | | 31-Oct-2021 | Longnose Sucker | ≤150 | 5 |
| | | | Mountain Whitefish | 200-299 | 1 |
| | | | Redside Shiner | ≤150 | 6 |
| | | | White Sucker | ≤150 | 1 |
| | | | | **Site Total** | **31** |
| | PCR-OCES06 | 5-Aug-2021 | Longnose Sucker | ≥300 | 3 |
| | | | Mountain Whitefish | ≥300 | 12 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | White Sucker | ≥300 | 3 |
| | | | White Sucker | 200-299 | 2 |
| | | 31-Oct-2021 | Lake Chub | ≤150 | 1 |
| | | | Large Scale Sucker | ≤150 | 3 |
| | | | Mountain Whitefish | ≥300 | 1 |
| | | | Mountain Whitefish | 200-299 | 1 |
| | | | Redside Shiner | ≤150 | 19 |
| | | | Spottail Shiner | ≤150 | 2 |
| | | | | **Site Total** | **52** |
| | | | | **Area Total** | **83** |

**Table 7. Continued (5 of 5).**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| West Side Channel | PCR-OCES12 | 5-Aug-2021 | Large Scale Sucker | ≥300 | 1 |
| | | | Longnose Sucker | 200-299 | 1 |
| | | | Mountain Whitefish | ≤150 | 2 |
| | | | Mountain Whitefish | ≥300 | 5 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | Redside Shiner | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | Walleye | ≥300 | 1 |
| | | | White Sucker | n/c | 1 |
| | | 30-Oct-2021 | Mountain Whitefish | ≤150 | 6 |
| | | | Mountain Whitefish | ≥300 | 1 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | | **Site Total** | **30** |
| | PCR-OCES13 | 4-Aug-2021 | Bull Trout | ≥300 | 1 |
| | | | Longnose Sucker | ≥300 | 1 |
| | | | Longnose Sucker | 200-299 | 2 |
| | | | Mountain Whitefish | ≥300 | 7 |
| | | | Mountain Whitefish | 200-299 | 14 |
| | | 30-Oct-2021 | Bull Trout | 200-299 | 1 |
| | | | Mountain Whitefish | ≤150 | 4 |
| | | | Mountain Whitefish | ≥300 | 1 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | Rainbow Trout | ≥300 | 1 |
| | | | | **Site Total** | **37** |
| | | | | **Area Total** | **67** |
| | | | | **Grand Total** | **266** |

**Table 8. Summary of fish capture from backpack electrofishing sampling in the Peace River in August – October 2021.**

| Channel | Site | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| East Side Channel | PCR-BP03 | 26-Sep-2021 | Lake Chub | ≤150 | 3 |
| | | | Longnose Dace | ≤150 | 2 |
| | | | Longnose Sucker | ≤150 | 1 |
| | | | Redside Shiner | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | White Sucker | ≤150 | 1 |
| | | 25-Oct-2021 | Burbot | ≤150 | 1 |
| | | | Large Scale Sucker | ≤150 | 1 |
| | | | Longnose Dace | ≤150 | 1 |
| | | | Longnose Sucker | ≤150 | 5 |
| | | | Slimy Sculpin | ≤150 | 16 |
| | | | Sucker spp. | ≤150 | 1 |
| | PCR-OCEF03 | 5-Aug-2021 | Longnose Dace | ≤150 | 9 |
| | | | Longnose Sucker | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 2 |
| | | | Slimy Sculpin | n/c | 29 |
| | | 25-Oct-2021 | Longnose Sucker | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 7 |
| | PCR-OCEF05 | 5-Aug-2021 | Longnose Sucker | ≤150 | 2 |
| | | | Prickly Sculpin | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 15 |
| | | | | **Area Total** | **101** |
| South Side Channel | PCR-OCEF06 | 5-Aug-2021 | Burbot | ≤150 | 9 |
| | | | Burbot | 200-299 | 1 |
| | | | Longnose Dace | ≤150 | 4 |
| | | | Longnose Sucker | ≤150 | 3 |
| | | | Northern Pike | ≤150 | 3 |
| | | | Prickly Sculpin | ≤150 | 4 |
| | | | Slimy Sculpin | ≤150 | 17 |
| | | | Troutperch | ≤150 | 1 |
| | | 25-Oct-2021 | Burbot | ≤150 | 1 |
| | | | Lake Chub | ≤150 | 1 |
| | | | Longnose Sucker | ≤150 | 72 |
| | | | Redside Shiner | ≤150 | 72 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | | **Area Total** | **189** |
| West Side Channel | PCR-BP01 | 26-Sep-2021 | Longnose Dace | ≤150 | 19 |
| | | 25-Oct-2021 | Lake Chub | ≤150 | 2 |
| | | | Longnose Sucker | ≤150 | 8 |
| | | | Prickly Sculpin | ≤150 | 2 |
| | | | Slimy Sculpin | ≤150 | 6 |
| | PCR-OCEF02 | 5-Aug-2021 | Burbot | ≤150 | 2 |
| | | | Longnose Sucker | ≤150 | 1 |
| | | | Prickly Sculpin | ≤150 | 2 |
| | | | Redside Shiner | ≤150 | 2 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | Spottail Shiner | ≤150 | 1 |
| | | 25-Oct-2021 | Lake Chub | ≤150 | 3 |
| | | | Longnose Dace | ≤150 | 6 |
| | | | Longnose Sucker | ≤150 | 3 |
| | | | Slimy Sculpin | ≤150 | 3 |
| | PCR-OCEF04 | 26-Oct-2021 | Large Scale Sucker | ≤150 | 13 |
| | | | Longnose Dace | ≤150 | 5 |
| | | | Longnose Sucker | ≤150 | 2 |
| | | | Redside Shiner | ≤150 | 1 |
| | | | Slimy Sculpin | ≤150 | 13 |
| | PCR-OCEF07 | 5-Aug-2021 | Lake Chub | ≤150 | 1 |
| | | | Longnose Dace | ≤150 | 21 |
| | | | Longnose Sucker | ≤150 | 3 |
| | | | Slimy Sculpin | ≤150 | 12 |
| | | | | **Area Total** | **132** |
| | | | | **Grand Total** | **422** |

**Table 9. Summary of fish capture from large boat electrofishing sampling in the Peace River in August - October 2021.**

| Channel | Site [1] | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| East Side Channel | OEM-DSC | 17-Aug-2021 | Bull Trout | ≥300 | 1 |
| | | | Lake Whitefish | ≥300 | 1 |
| | | | Large Scale Sucker | ≥300 | 2 |
| | | | Longnose Sucker | ≥300 | 7 |
| | | | Mountain Whitefish | ≥300 | 11 |
| | | | Mountain Whitefish | 200-299 | 5 |
| | | | Northern Pike | ≥300 | 4 |
| | | | White Sucker | ≥300 | 4 |
| | | 24-Aug-2021 | Lake Whitefish | ≥300 | 1 |
| | | | Mountain Whitefish | ≤150 | 1 |
| | | | Mountain Whitefish | ≥300 | 10 |
| | | | Mountain Whitefish | 200-299 | 13 |
| | | | Spottail Shiner | ≤150 | 1 |
| | | | White Sucker | ≥300 | 6 |
| | | | Yellow Perch | 200-299 | 1 |
| | | 1-Sep-2021 | Longnose Sucker | ≥300 | 13 |
| | | | Mountain Whitefish | ≥300 | 5 |
| | | | Mountain Whitefish | 200-299 | 4 |
| | | | Northern Pike | ≥300 | 1 |
| | | | White Sucker | ≥300 | 10 |
| | | | White Sucker | 200-299 | 1 |
| | | 14-Sep-2021 | Bull Trout | ≥300 | 1 |
| | | | Longnose Sucker | ≥300 | 5 |
| | | | Mountain Whitefish | 200-299 | 1 |
| | | | Walleye | ≥300 | 1 |
| | | | White Sucker | ≥300 | 10 |
| | | | | **Area Total** | **120** |

[1] OEM sites had data collected by Golder Associates

**Table 9. Continued (2 of 3).**

| Channel | Site [1] | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| Main Channel Bar | OEM-MS | 16-Aug-2021 | Large Scale Sucker | ≥300 | 10 |
| | | | Large Scale Sucker | 200-299 | 1 |
| | | | Longnose Sucker | ≥300 | 17 |
| | | | Longnose Sucker | 200-299 | 2 |
| | | | Mountain Whitefish | ≥300 | 9 |
| | | | Mountain Whitefish | 200-299 | 20 |
| | | | Northern Pike | ≥300 | 1 |
| | | | Redside Shiner | ≤150 | 1 |
| | | | Walleye | ≥300 | 2 |
| | | | White Sucker | ≥300 | 2 |
| | | 25-Aug-2021 | Bull Trout | ≥300 | 1 |
| | | | Bull Trout | 200-299 | 1 |
| | | | Large Scale Sucker | ≥300 | 2 |
| | | | Large Scale Sucker | 200-299 | 1 |
| | | | Longnose Sucker | ≥300 | 9 |
| | | | Longnose Sucker | 200-299 | 6 |
| | | | Mountain Whitefish | ≥300 | 5 |
| | | | Mountain Whitefish | 151-199 | 1 |
| | | | Mountain Whitefish | 200-299 | 18 |
| | | | Northern Pikeminnow | ≥300 | 1 |
| | | | Redside Shiner | ≤150 | 1 |
| | | 1-Sep-2021 | Bull Trout | ≥300 | 1 |
| | | | Large Scale Sucker | ≥300 | 3 |
| | | | Longnose Dace | ≤150 | 1 |
| | | | Longnose Sucker | ≥300 | 9 |
| | | | Mountain Whitefish | ≥300 | 6 |
| | | | Mountain Whitefish | 200-299 | 20 |
| | | | Walleye | ≥300 | 1 |
| | | 14-Sep-2021 | Longnose Sucker | ≥300 | 5 |
| | | | Longnose Sucker | 200-299 | 2 |
| | | | Mountain Whitefish | ≥300 | 3 |
| | | | Mountain Whitefish | 200-299 | 12 |
| | | | Northern Pikeminnow | ≥300 | 2 |
| | | | Walleye | ≥300 | 2 |
| | | | | **Area Total** | **178** |

[1] OEM sites had data collected by Golder Associates

## Table 9. Continued (3 of 3).

| Channel | Site [1] | Date | Species | Size Class (mm) | Number Captured |
|---|---|---|---|---|---|
| West Side Channel | OEM-USC | 17-Aug-2021 | Large Scale Sucker | ≥300 | 3 |
| | | | Large Scale Sucker | 200-299 | 1 |
| | | | Longnose Sucker | ≥300 | 6 |
| | | | Longnose Sucker | 151-199 | 1 |
| | | | Longnose Sucker | 200-299 | 1 |
| | | | Mountain Whitefish | ≤150 | 2 |
| | | | Mountain Whitefish | ≥300 | 8 |
| | | | Mountain Whitefish | 151-199 | 1 |
| | | | Mountain Whitefish | 200-299 | 12 |
| | | | Northern Pike | ≥300 | 1 |
| | | | Walleye | ≥300 | 1 |
| | | | White Sucker | ≥300 | 3 |
| | | 24-Aug-2021 | Bull Trout | 200-299 | 1 |
| | | | Lake Chub | ≤150 | 1 |
| | | | Large Scale Sucker | 200-299 | 3 |
| | | | Longnose Sucker | ≤150 | 1 |
| | | | Longnose Sucker | ≥300 | 6 |
| | | | Longnose Sucker | 200-299 | 4 |
| | | | Mountain Whitefish | ≤150 | 4 |
| | | | Mountain Whitefish | ≥300 | 15 |
| | | | Mountain Whitefish | 151-199 | 3 |
| | | | Mountain Whitefish | 200-299 | 30 |
| | | | Northern Pikeminnow | ≥300 | 1 |
| | | | Northern Pikeminnow | 200-299 | 2 |
| | | | Slimy Sculpin | ≤150 | 1 |
| | | | Walleye | ≥300 | 2 |
| | | | Walleye | 200-299 | 1 |
| | | | White Sucker | 200-299 | 1 |
| | | 1-Sep-2021 | Bull Trout | ≥300 | 1 |
| | | | Bull Trout | 200-299 | 1 |
| | | | Large Scale Sucker | ≥300 | 15 |
| | | | Large Scale Sucker | 200-299 | 5 |
| | | | Longnose Sucker | ≥300 | 6 |
| | | | Longnose Sucker | 200-299 | 8 |
| | | | Mountain Whitefish | ≤150 | 1 |
| | | | Mountain Whitefish | ≥300 | 12 |
| | | | Mountain Whitefish | 151-199 | 3 |
| | | | Mountain Whitefish | 200-299 | 16 |
| | | | Northern Pikeminnow | ≥300 | 1 |
| | | | Northern Pikeminnow | 151-199 | 2 |
| | | | Walleye | ≥300 | 5 |
| | | | White Sucker | ≥300 | 4 |
| | | | White Sucker | 200-299 | 1 |
| | | 15-Sep-2021 | Large Scale Sucker | ≥300 | 2 |
| | | | Longnose Sucker | ≥300 | 2 |
| | | | Longnose Sucker | 200-299 | 1 |
| | | | Mountain Whitefish | ≤150 | 1 |
| | | | Mountain Whitefish | ≥300 | 3 |
| | | | Mountain Whitefish | 151-199 | 1 |
| | | | Mountain Whitefish | 200-299 | 10 |
| | | | Northern Pike | ≥300 | 1 |
| | | | Northern Pikeminnow | 151-199 | 1 |
| | | | | **Area Total** | **219** |
| | | | | **Grand Total** | **517** |

[1] OEM sites had data collected by Golder Associates

**Table 10. Summary of fish capture data, morphometric measurements and tagging information of all fish captured during sampling in 2021.**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-DSC | 17-Aug-2021 | 383629 | BE | Lake Whitefish | 506 | 1685 | 900230000032508 |
| OEM-DSC | 17-Aug-2021 | 383630 | BE | Mountain Whitefish | 340 | 305 | |
| OEM-DSC | 17-Aug-2021 | 383631 | BE | Mountain Whitefish | 374 | 372 | 900230000262337 |
| OEM-DSC | 17-Aug-2021 | 383632 | BE | Mountain Whitefish | 321 | 274 | 900230000262773 |
| OEM-DSC | 17-Aug-2021 | 383633 | BE | Mountain Whitefish | 396 | 452 | 900230000262875 |
| OEM-DSC | 17-Aug-2021 | 383634 | BE | Mountain Whitefish | 307 | 271 | 900230000262904 |
| OEM-DSC | 17-Aug-2021 | 383635 | BE | Mountain Whitefish | 366 | 358 | |
| OEM-DSC | 17-Aug-2021 | 383636 | BE | Mountain Whitefish | 313 | 257 | 900230000262601 |
| OEM-DSC | 17-Aug-2021 | 383637 | BE | Mountain Whitefish | 350 | 353 | |
| OEM-DSC | 17-Aug-2021 | 383638 | BE | Mountain Whitefish | 290 | 217 | 900228000463177 |
| OEM-DSC | 17-Aug-2021 | 383639 | BE | Mountain Whitefish | 341 | 306 | 900230000262149 |
| OEM-DSC | 17-Aug-2021 | 383640 | BE | Mountain Whitefish | 274 | 202 | 900228000461621 |
| OEM-DSC | 17-Aug-2021 | 383641 | BE | Mountain Whitefish | 283 | 201 | 900228000464617 |
| OEM-DSC | 17-Aug-2021 | 383642 | BE | Mountain Whitefish | 272 | 180 | 900228000462616 |
| OEM-DSC | 17-Aug-2021 | 383643 | BE | Mountain Whitefish | 338 | 323 | 900230000262073 |
| OEM-DSC | 17-Aug-2021 | 383644 | BE | Mountain Whitefish | 302 | 239 | 900230000262842 |
| OEM-DSC | 17-Aug-2021 | 383645 | BE | Longnose Sucker | 441 | 994 | 900230000262763 |
| OEM-DSC | 17-Aug-2021 | 383646 | BE | Longnose Sucker | 416 | 751 | 900230000268110 |
| OEM-DSC | 17-Aug-2021 | 383647 | BE | Longnose Sucker | 443 | 1090 | 900230000262637 |
| OEM-DSC | 17-Aug-2021 | 383648 | BE | Large Scale Sucker | 362 | 575 | 900230000262879 |
| OEM-DSC | 17-Aug-2021 | 383649 | BE | White Sucker | 461 | 1315 | 900230000262229 |
| OEM-DSC | 17-Aug-2021 | 383650 | BE | Longnose Sucker | 462 | 956 | 900230000079206 |
| OEM-DSC | 17-Aug-2021 | 383651 | BE | White Sucker | 425 | 873 | 900230000262268 |
| OEM-DSC | 17-Aug-2021 | 383652 | BE | Mountain Whitefish | 279 | 178 | 900228000464236 |
| OEM-DSC | 17-Aug-2021 | 383653 | BE | Longnose Sucker | 444 | 1050 | 900230000262989 |
| OEM-DSC | 17-Aug-2021 | 383654 | BE | Large Scale Sucker | 395 | 757 | 900230000262820 |
| OEM-DSC | 17-Aug-2021 | 383655 | BE | Longnose Sucker | 403 | 857 | 900230000268906 |
| OEM-DSC | 17-Aug-2021 | 383656 | BE | Longnose Sucker | 448 | 1126 | 900230000262076 |
| OEM-DSC | 17-Aug-2021 | 383657 | BE | White Sucker | 436 | 1111 | 900230000262116 |
| OEM-DSC | 17-Aug-2021 | 383658 | BE | Northern Pike | 643 | 1967 | 900230000262950 |
| OEM-DSC | 17-Aug-2021 | 383659 | BE | White Sucker | 410 | 837 | 900230000262956 |
| OEM-DSC | 17-Aug-2021 | 383660 | BE | Northern Pike | 587 | 1540 | 900230000266518 |
| OEM-DSC | 17-Aug-2021 | 383661 | BE | Northern Pike | 621 | 1866 | 900230000262797 |
| OEM-DSC | 17-Aug-2021 | 383662 | BE | Northern Pike | 616 | 1864 | 900230000268315 |
| OEM-DSC | 17-Aug-2021 | 383663 | BE | Bull Trout | 542 | 1666 | 900230000263041 |
| OEM-DSC | 24-Aug-2021 | 385558 | BE | Mountain Whitefish | 74 | 5 | |
| OEM-DSC | 24-Aug-2021 | 385559 | BE | Spottail Shiner | 62 | 3 | |
| OEM-DSC | 24-Aug-2021 | 385560 | BE | Lake Whitefish | 435 | 987 | 900230000263505 |
| OEM-DSC | 24-Aug-2021 | 385561 | BE | Mountain Whitefish | 352 | 323 | |
| OEM-DSC | 24-Aug-2021 | 385562 | BE | White Sucker | 464 | 1161 | 900230000262633 |
| OEM-DSC | 24-Aug-2021 | 385563 | BE | Mountain Whitefish | 375 | 430 | |
| OEM-DSC | 24-Aug-2021 | 385564 | BE | Mountain Whitefish | 261 | 146 | 900228000464339 |
| OEM-DSC | 24-Aug-2021 | 385565 | BE | Mountain Whitefish | 262 | 179 | 900228000464863 |
| OEM-DSC | 24-Aug-2021 | 385566 | BE | Mountain Whitefish | 332 | 304 | 900230000262071 |
| OEM-DSC | 24-Aug-2021 | 385567 | BE | Mountain Whitefish | 270 | 176 | 900228000465745 |
| OEM-DSC | 24-Aug-2021 | 385568 | BE | White Sucker | 438 | 989 | 981098104794867 |
| OEM-DSC | 24-Aug-2021 | 385569 | BE | Mountain Whitefish | 285 | 164 | 900228000463060 |
| OEM-DSC | 24-Aug-2021 | 385570 | BE | White Sucker | 418 | 881 | 900230000263571 |
| OEM-DSC | 24-Aug-2021 | 385571 | BE | Mountain Whitefish | 282 | 186 | 900228000465153 |
| OEM-DSC | 24-Aug-2021 | 385572 | BE | Mountain Whitefish | 280 | 196 | 900228000462704 |
| OEM-DSC | 24-Aug-2021 | 385573 | BE | White Sucker | 456 | 1019 | 900230000262866 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (2 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-DSC | 24-Aug-2021 | 385574 | BE | Mountain Whitefish | 303 | 234 | 900230000262502 |
| OEM-DSC | 24-Aug-2021 | 385575 | BE | Mountain Whitefish | 285 | 195 | 900228000462676 |
| OEM-DSC | 24-Aug-2021 | 385576 | BE | White Sucker | 426 | 1010 | 900230000263439 |
| OEM-DSC | 24-Aug-2021 | 385577 | BE | White Sucker | 473 | 1131 | 900230000262756 |
| OEM-DSC | 24-Aug-2021 | 385578 | BE | Mountain Whitefish | 209 | 83 | 900228000463223 |
| OEM-DSC | 24-Aug-2021 | 385579 | BE | Mountain Whitefish | 276 | 170 | 900228000462045 |
| OEM-DSC | 24-Aug-2021 | 385580 | BE | Mountain Whitefish | 308 | 237 | 900230000263743 |
| OEM-DSC | 24-Aug-2021 | 385581 | BE | Mountain Whitefish | 315 | 278 | 900230000263804 |
| OEM-DSC | 24-Aug-2021 | 385582 | BE | Mountain Whitefish | 285 | 198 | 900228000462339 |
| OEM-DSC | 24-Aug-2021 | 385583 | BE | Mountain Whitefish | 338 | 299 | |
| OEM-DSC | 24-Aug-2021 | 385584 | BE | Mountain Whitefish | 305 | 218 | 900230000262146 |
| OEM-DSC | 24-Aug-2021 | 385585 | BE | Mountain Whitefish | 328 | 277 | 900230000263205 |
| OEM-DSC | 24-Aug-2021 | 385586 | BE | Mountain Whitefish | 313 | 235 | 900230000263343 |
| OEM-DSC | 24-Aug-2021 | 385587 | BE | Mountain Whitefish | 266 | 163 | |
| OEM-DSC | 24-Aug-2021 | 385588 | BE | Mountain Whitefish | 270 | 160 | 900228000462644 |
| OEM-DSC | 24-Aug-2021 | 385589 | BE | Mountain Whitefish | 247 | 126 | 900228000462890 |
| OEM-DSC | 24-Aug-2021 | 385590 | BE | Yellow Perch | 285 | 330 | 900228000463066 |
| OEM-DSC | 1-Sep-2021 | 387947 | BE | Mountain Whitefish | 376 | 401 | |
| OEM-DSC | 1-Sep-2021 | 387948 | BE | Mountain Whitefish | 312 | 273 | 981098104933862 |
| OEM-DSC | 1-Sep-2021 | 387949 | BE | Mountain Whitefish | 279 | 185 | 900228000464972 |
| OEM-DSC | 1-Sep-2021 | 387950 | BE | Mountain Whitefish | 355 | 316 | |
| OEM-DSC | 1-Sep-2021 | 387951 | BE | Mountain Whitefish | 334 | 306 | 900026000034672 |
| OEM-DSC | 1-Sep-2021 | 387952 | BE | Mountain Whitefish | 254 | 134 | 900228000462603 |
| OEM-DSC | 1-Sep-2021 | 387953 | BE | Longnose Sucker | 432 | 868 | 900230000158131 |
| OEM-DSC | 1-Sep-2021 | 387954 | BE | White Sucker | 450 | 1112 | 900230000158096 |
| OEM-DSC | 1-Sep-2021 | 387955 | BE | Longnose Sucker | 447 | 1091 | 900230000158064 |
| OEM-DSC | 1-Sep-2021 | 387956 | BE | Mountain Whitefish | 311 | 248 | |
| OEM-DSC | 1-Sep-2021 | 387957 | BE | Mountain Whitefish | 285 | 200 | 900228000462676 |
| OEM-DSC | 1-Sep-2021 | 387958 | BE | White Sucker | 370 | 606 | 900230000158175 |
| OEM-DSC | 1-Sep-2021 | 387959 | BE | White Sucker | 400 | 738 | |
| OEM-DSC | 1-Sep-2021 | 387960 | BE | Longnose Sucker | 443 | 1102 | 900230000204858 |
| OEM-DSC | 1-Sep-2021 | 387961 | BE | Longnose Sucker | 391 | 756 | 900230000158035 |
| OEM-DSC | 1-Sep-2021 | 387962 | BE | White Sucker | 398 | 760 | 900230000263445 |
| OEM-DSC | 1-Sep-2021 | 387963 | BE | Longnose Sucker | 413 | 850 | 900230000158361 |
| OEM-DSC | 1-Sep-2021 | 387964 | BE | Longnose Sucker | 464 | 1329 | 900230000158053 |
| OEM-DSC | 1-Sep-2021 | 387965 | BE | White Sucker | 377 | 568 | 900230000263252 |
| OEM-DSC | 1-Sep-2021 | 387966 | BE | Longnose Sucker | 438 | 892 | 900230000158356 |
| OEM-DSC | 1-Sep-2021 | 387967 | BE | Mountain Whitefish | 271 | 178 | 900228000462616 |
| OEM-DSC | 1-Sep-2021 | 387968 | BE | Northern Pike | 478 | 810 | 900230000158213 |
| OEM-DSC | 1-Sep-2021 | 387969 | BE | White Sucker | 418 | 896 | 900230000263571 |
| OEM-DSC | 1-Sep-2021 | 387970 | BE | Longnose Sucker | 425 | 935 | 900230000158057 |
| OEM-DSC | 1-Sep-2021 | 387971 | BE | White Sucker | 415 | 894 | 900230000204031 |
| OEM-DSC | 1-Sep-2021 | 387972 | BE | Longnose Sucker | 400 | 840 | 981098104938332 |
| OEM-DSC | 1-Sep-2021 | 387973 | BE | Longnose Sucker | 444 | 1028 | 900230000263564 |
| OEM-DSC | 1-Sep-2021 | 387974 | BE | Longnose Sucker | 396 | 851 | 900230000158208 |
| OEM-DSC | 1-Sep-2021 | 387975 | BE | Longnose Sucker | 405 | 816 | 900230000158473 |
| OEM-DSC | 1-Sep-2021 | 387976 | BE | White Sucker | 425 | 1002 | 900230000263439 |
| OEM-DSC | 1-Sep-2021 | 387977 | BE | White Sucker | 398 | 770 | 900230000158070 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (3 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-DSC | 1-Sep-2021 | 387978 | BE | Longnose Sucker | 345 | 528 | 900230000158255 |
| OEM-DSC | 1-Sep-2021 | 387979 | BE | White Sucker | 391 | 766 | 900230000158051 |
| OEM-DSC | 1-Sep-2021 | 387980 | BE | White Sucker | 203 | 91 | 900228000462631 |
| OEM-DSC | 14-Sep-2021 | 383651 | BE | White Sucker | 469 | 1358 | 900230000268298 |
| OEM-DSC | 14-Sep-2021 | 383652 | BE | White Sucker | 392 | 718 | 900230000202007 |
| OEM-DSC | 14-Sep-2021 | 383654 | BE | White Sucker | 405 | 893 | 900230000209495 |
| OEM-DSC | 14-Sep-2021 | 383655 | BE | Longnose Sucker | 433 | 862 | 900230000210440 |
| OEM-DSC | 14-Sep-2021 | 383656 | BE | White Sucker | 479 | 1464 | 900230000269534 |
| OEM-DSC | 14-Sep-2021 | 383657 | BE | White Sucker | 410 | 1003 | 900230000268611 |
| OEM-DSC | 14-Sep-2021 | 383658 | BE | Longnose Sucker | 420 | 847 | 900230000211313 |
| OEM-DSC | 14-Sep-2021 | 383659 | BE | Longnose Sucker | 435 | 1008 | 900026000054794 |
| OEM-DSC | 14-Sep-2021 | 383660 | BE | White Sucker | 380 | 860 | 900230000268972 |
| OEM-DSC | 14-Sep-2021 | 383661 | BE | Longnose Sucker | 420 | 830 | 900230000209498 |
| OEM-DSC | 14-Sep-2021 | 383662 | BE | White Sucker | 432 | 958 | 900230000211907 |
| OEM-DSC | 14-Sep-2021 | 383663 | BE | Longnose Sucker | 340 | 493 | 900230000269150 |
| OEM-DSC | 14-Sep-2021 | 383664 | BE | White Sucker | 318 | 461 | 900230000268766 |
| OEM-DSC | 14-Sep-2021 | 383665 | BE | Mountain Whitefish | 278 | 184 | 900228000439559 |
| OEM-DSC | 14-Sep-2021 | 383666 | BE | White Sucker | 433 | 1108 | 900230000269707 |
| OEM-DSC | 14-Sep-2021 | 383667 | BE | White Sucker | 384 | 697 | 900230000210009 |
| OEM-DSC | 14-Sep-2021 | 383668 | BE | Walleye | 360 | 497 | 900230000268679 |
| OEM-DSC | 14-Sep-2021 | 383669 | BE | Bull Trout | 390 | 537 | 900230000266575 |
| OEM-MS | 16-Aug-2021 | 383462 | BE | Mountain Whitefish | 345 | 326 | 900230000204620 |
| OEM-MS | 16-Aug-2021 | 383463 | BE | Mountain Whitefish | 295 | 194 | 900228000465375 |
| OEM-MS | 16-Aug-2021 | 383464 | BE | Mountain Whitefish | 270 | 164 | 900228000465618 |
| OEM-MS | 16-Aug-2021 | 383465 | BE | Mountain Whitefish | 266 | 186 | 900228000463220 |
| OEM-MS | 16-Aug-2021 | 383466 | BE | Mountain Whitefish | 312 | 295 | 900230000262178 |
| OEM-MS | 16-Aug-2021 | 383467 | BE | Mountain Whitefish | 258 | 148 | 900228000463132 |
| OEM-MS | 16-Aug-2021 | 383468 | BE | Mountain Whitefish | 336 | 329 | 900230000205405 |
| OEM-MS | 16-Aug-2021 | 383469 | BE | Mountain Whitefish | 324 | 276 | 900230000262104 |
| OEM-MS | 16-Aug-2021 | 383470 | BE | Mountain Whitefish | 283 | 198 | 900228000462823 |
| OEM-MS | 16-Aug-2021 | 383471 | BE | Mountain Whitefish | 283 | 207 | 900228000348975 |
| OEM-MS | 16-Aug-2021 | 383472 | BE | Mountain Whitefish | 265 | 168 | 900228000462529 |
| OEM-MS | 16-Aug-2021 | 383473 | BE | Mountain Whitefish | 342 | 281 | 900230000262047 |
| OEM-MS | 16-Aug-2021 | 383474 | BE | Mountain Whitefish | 282 | 185 | 900228000463248 |
| OEM-MS | 16-Aug-2021 | 383475 | BE | Mountain Whitefish | 283 | 186 | 900228000462331 |
| OEM-MS | 16-Aug-2021 | 383476 | BE | Mountain Whitefish | 339 | 303 | 900230000262461 |
| OEM-MS | 16-Aug-2021 | 383477 | BE | Mountain Whitefish | 293 | 248 | 981098104942943 |
| OEM-MS | 16-Aug-2021 | 383478 | BE | Mountain Whitefish | 289 | 219 | 900228000462975 |
| OEM-MS | 16-Aug-2021 | 383479 | BE | Mountain Whitefish | 324 | 296 | 900230000210487 |
| OEM-MS | 16-Aug-2021 | 383480 | BE | Northern Pike | 445 | 666 | 900230000262920 |
| OEM-MS | 16-Aug-2021 | 383481 | BE | Large Scale Sucker | 453 | 1154 | 900230000262292 |
| OEM-MS | 16-Aug-2021 | 383482 | BE | Mountain Whitefish | 273 | 169 | 900228000460193 |
| OEM-MS | 16-Aug-2021 | 383483 | BE | Large Scale Sucker | 494 | 1475 | 900230000262151 |
| OEM-MS | 16-Aug-2021 | 383484 | BE | White Sucker | 407 | 832 | 900230000268770 |
| OEM-MS | 16-Aug-2021 | 383485 | BE | Longnose Sucker | 392 | 648 | 900230000262244 |
| OEM-MS | 16-Aug-2021 | 383486 | BE | Large Scale Sucker | 476 | 1351 | 900230000263048 |
| OEM-MS | 16-Aug-2021 | 383487 | BE | Large Scale Sucker | 539 | 1737 | 900230000262929 |
| OEM-MS | 16-Aug-2021 | 383488 | BE | Longnose Sucker | 445 | 1006 | 900230000262643 |
| OEM-MS | 16-Aug-2021 | 383489 | BE | Longnose Sucker | 385 | 650 | 900230000262488 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (4 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-MS | 16-Aug-2021 | 383490 | BE | Large Scale Sucker | 444 | 1094 | 900230000262181 |
| OEM-MS | 16-Aug-2021 | 383491 | BE | Longnose Sucker | 450 | 1051 | 981098106068945 |
| OEM-MS | 16-Aug-2021 | 383492 | BE | Longnose Sucker | 394 | 813 | 900230000262713 |
| OEM-MS | 16-Aug-2021 | 383493 | BE | Walleye | 455 | 908 | 900230000080683 |
| OEM-MS | 16-Aug-2021 | 383494 | BE | Mountain Whitefish | 282 | 214 | 900228000461952 |
| OEM-MS | 16-Aug-2021 | 383495 | BE | Walleye | 450 | 1040 | 900230000262614 |
| OEM-MS | 16-Aug-2021 | 383496 | BE | Mountain Whitefish | 315 | 252 | 900230000262340 |
| OEM-MS | 16-Aug-2021 | 383497 | BE | Mountain Whitefish | 285 | 196 | 900228000465063 |
| OEM-MS | 16-Aug-2021 | 383498 | BE | Mountain Whitefish | 286 | 200 | 900228000439087 |
| OEM-MS | 16-Aug-2021 | 383499 | BE | Mountain Whitefish | 280 | 175 | 900228000636077 |
| OEM-MS | 16-Aug-2021 | 383500 | BE | Mountain Whitefish | 257 | 143 | 900228000463245 |
| OEM-MS | 16-Aug-2021 | 383501 | BE | Mountain Whitefish | 267 | 166 | 900228000465128 |
| OEM-MS | 16-Aug-2021 | 383502 | BE | Mountain Whitefish | 268 | 207 | 900228000462505 |
| OEM-MS | 16-Aug-2021 | 383503 | BE | Mountain Whitefish | 272 | 189 | 900228000464525 |
| OEM-MS | 16-Aug-2021 | 383504 | BE | Redside Shiner | 100 | 13 | |
| OEM-MS | 16-Aug-2021 | 383505 | BE | White Sucker | 455 | 1106 | 900230000262657 |
| OEM-MS | 16-Aug-2021 | 383506 | BE | Longnose Sucker | 395 | 723 | 900230000056410 |
| OEM-MS | 16-Aug-2021 | 383507 | BE | Longnose Sucker | 317 | 366 | 900230000262401 |
| OEM-MS | 16-Aug-2021 | 383508 | BE | Longnose Sucker | 339 | 452 | 900230000262576 |
| OEM-MS | 16-Aug-2021 | 383509 | BE | Large Scale Sucker | 521 | 1913 | 900230000262728 |
| OEM-MS | 16-Aug-2021 | 383510 | BE | Mountain Whitefish | 359 | 384 | 900230000204462 |
| OEM-MS | 16-Aug-2021 | 383511 | BE | Large Scale Sucker | 440 | 1048 | 900230000262105 |
| OEM-MS | 16-Aug-2021 | 383512 | BE | Longnose Sucker | 386 | 625 | 900230000262160 |
| OEM-MS | 16-Aug-2021 | 383513 | BE | Longnose Sucker | 443 | 946 | 900230000262091 |
| OEM-MS | 16-Aug-2021 | 383514 | BE | Longnose Sucker | 410 | 744 | 900230000262214 |
| OEM-MS | 16-Aug-2021 | 383515 | BE | Large Scale Sucker | 462 | 1326 | 900230000262515 |
| OEM-MS | 16-Aug-2021 | 383516 | BE | Large Scale Sucker | 459 | 1223 | 900230000262507 |
| OEM-MS | 16-Aug-2021 | 383517 | BE | Longnose Sucker | 362 | 590 | 900230000055158 |
| OEM-MS | 16-Aug-2021 | 383518 | BE | Longnose Sucker | 374 | 574 | 900230000262051 |
| OEM-MS | 16-Aug-2021 | 383519 | BE | Large Scale Sucker | 279 | 258 | 900228000461704 |
| OEM-MS | 16-Aug-2021 | 383520 | BE | Longnose Sucker | 284 | 245 | 900228000462233 |
| OEM-MS | 16-Aug-2021 | 383521 | BE | Longnose Sucker | 403 | 757 | 900230000262761 |
| OEM-MS | 16-Aug-2021 | 383522 | BE | Large Scale Sucker | 464 | 1218 | 900230000262469 |
| OEM-MS | 16-Aug-2021 | 383523 | BE | Longnose Sucker | 334 | 430 | 900230000262807 |
| OEM-MS | 16-Aug-2021 | 383524 | BE | Longnose Sucker | 364 | 571 | 900230000262263 |
| OEM-MS | 16-Aug-2021 | 383525 | BE | Longnose Sucker | 271 | 190 | 900228000465046 |
| OEM-MS | 16-Aug-2021 | 383526 | BE | Longnose Sucker | 394 | 643 | 900230000262512 |
| OEM-MS | 25-Aug-2021 | 385914 | BE | Mountain Whitefish | 335 | 282 | 900230000263263 |
| OEM-MS | 25-Aug-2021 | 385915 | BE | Northern Pikeminnow | 509 | 1485 | |
| OEM-MS | 25-Aug-2021 | 385916 | BE | Mountain Whitefish | 283 | 197 | 900228000462398 |
| OEM-MS | 25-Aug-2021 | 385917 | BE | Mountain Whitefish | 293 | 205 | 900228000465055 |
| OEM-MS | 25-Aug-2021 | 385918 | BE | Mountain Whitefish | 316 | 249 | 900230000262551 |
| OEM-MS | 25-Aug-2021 | 385919 | BE | Mountain Whitefish | 254 | 142 | 900228000463040 |
| OEM-MS | 25-Aug-2021 | 385920 | BE | Mountain Whitefish | 281 | 176 | 900228000462503 |
| OEM-MS | 25-Aug-2021 | 385921 | BE | Longnose Sucker | 455 | 1060 | 900230000055254 |
| OEM-MS | 25-Aug-2021 | 385922 | BE | Mountain Whitefish | 290 | 203 | 900228000465467 |
| OEM-MS | 25-Aug-2021 | 385923 | BE | Mountain Whitefish | 265 | 160 | 900228000462383 |
| OEM-MS | 25-Aug-2021 | 385924 | BE | Redside Shiner | 86 | 7 | |
| OEM-MS | 25-Aug-2021 | 385925 | BE | Mountain Whitefish | 259 | 130 | 900228000463006 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (5 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-MS | 25-Aug-2021 | 385926 | BE | Mountain Whitefish | 293 | 206 | 900228000465887 |
| OEM-MS | 25-Aug-2021 | 385927 | BE | Large Scale Sucker | 542 | 1594 | 900230000206216 |
| OEM-MS | 25-Aug-2021 | 385928 | BE | Mountain Whitefish | 273 | 182 | 900228000462494 |
| OEM-MS | 25-Aug-2021 | 385929 | BE | Mountain Whitefish | 239 | 118 | 900228000462189 |
| OEM-MS | 25-Aug-2021 | 385930 | BE | Longnose Sucker | 254 | 1075 | 900230000262233 |
| OEM-MS | 25-Aug-2021 | 385931 | BE | Large Scale Sucker | 477 | 1330 | 900230000263642 |
| OEM-MS | 25-Aug-2021 | 385932 | BE | Longnose Sucker | 379 | 588 | 900230000263511 |
| OEM-MS | 25-Aug-2021 | 385933 | BE | Mountain Whitefish | 342 | 316 | 900230000206447 |
| OEM-MS | 25-Aug-2021 | 385934 | BE | Mountain Whitefish | 262 | 152 | 900228000462277 |
| OEM-MS | 25-Aug-2021 | 385935 | BE | Mountain Whitefish | 271 | 175 | 900228000635897 |
| OEM-MS | 25-Aug-2021 | 385936 | BE | Longnose Sucker | 347 | 510 | 900230000263769 |
| OEM-MS | 25-Aug-2021 | 385937 | BE | Mountain Whitefish | 282 | 199 | 900228000462257 |
| OEM-MS | 25-Aug-2021 | 385938 | BE | Large Scale Sucker | 239 | 168 | 900228000464937 |
| OEM-MS | 25-Aug-2021 | 385939 | BE | Mountain Whitefish | 224 | 111 | 900228000462362 |
| OEM-MS | 25-Aug-2021 | 385940 | BE | Mountain Whitefish | 320 | 670 | 900230000262687 |
| OEM-MS | 25-Aug-2021 | 385941 | BE | Mountain Whitefish | 289 | 158 | 900228000462833 |
| OEM-MS | 25-Aug-2021 | 385942 | BE | Longnose Sucker | 269 | 226 | 900228000462024 |
| OEM-MS | 25-Aug-2021 | 385943 | BE | Longnose Sucker | 408 | 787 | 900230000263871 |
| OEM-MS | 25-Aug-2021 | 385944 | BE | Longnose Sucker | 430 | 816 | 900230000263674 |
| OEM-MS | 25-Aug-2021 | 385945 | BE | Mountain Whitefish | 265 | 152 | 900228000462595 |
| OEM-MS | 25-Aug-2021 | 385946 | BE | Mountain Whitefish | 257 | 144 | 900228000462686 |
| OEM-MS | 25-Aug-2021 | 385947 | BE | Longnose Sucker | 237 | 157 | 900228000462308 |
| OEM-MS | 25-Aug-2021 | 385948 | BE | Mountain Whitefish | 281 | 176 | 900228000678567 |
| OEM-MS | 25-Aug-2021 | 385949 | BE | Mountain Whitefish | 359 | 369 | 900230000204462 |
| OEM-MS | 25-Aug-2021 | 385950 | BE | Mountain Whitefish | 165 | 46 | 900226001222240 |
| OEM-MS | 25-Aug-2021 | 385951 | BE | Longnose Sucker | 390 | 584 | 900230000262277 |
| OEM-MS | 25-Aug-2021 | 385952 | BE | Bull Trout | 360 | 410 | 900230000263971 |
| OEM-MS | 25-Aug-2021 | 385953 | BE | Longnose Sucker | 368 | 549 | |
| OEM-MS | 25-Aug-2021 | 385954 | BE | Bull Trout | 265 | 178 | 900228000462304 |
| OEM-MS | 25-Aug-2021 | 385955 | BE | Longnose Sucker | 263 | 213 | 900228000462638 |
| OEM-MS | 25-Aug-2021 | 385956 | BE | Longnose Sucker | 344 | 480 | 900228000635801 |
| OEM-MS | 25-Aug-2021 | 385957 | BE | Longnose Sucker | 434 | 852 | 900230000263802 |
| OEM-MS | 25-Aug-2021 | 385958 | BE | Longnose Sucker | 285 | 229 | 900228000463009 |
| OEM-MS | 25-Aug-2021 | 385959 | BE | Longnose Sucker | 229 | 138 | 900228000462875 |
| OEM-MS | 1-Sep-2021 | 388238 | BE | Mountain Whitefish | 302 | 212 | 900230000158938 |
| OEM-MS | 1-Sep-2021 | 388239 | BE | Mountain Whitefish | 284 | 179 | 900228000462430 |
| OEM-MS | 1-Sep-2021 | 388240 | BE | Mountain Whitefish | 252 | 171 | 900228000462822 |
| OEM-MS | 1-Sep-2021 | 388241 | BE | Walleye | 467 | 1006 | 900230000159122 |
| OEM-MS | 1-Sep-2021 | 388242 | BE | Mountain Whitefish | 275 | 187 | 900228000462361 |
| OEM-MS | 1-Sep-2021 | 388243 | BE | Mountain Whitefish | 314 | 252 | 900230000031415 |
| OEM-MS | 1-Sep-2021 | 388244 | BE | Mountain Whitefish | 272 | 169 | 900228000462475 |
| OEM-MS | 1-Sep-2021 | 388245 | BE | Mountain Whitefish | 266 | 166 | 900228000462469 |
| OEM-MS | 1-Sep-2021 | 388246 | BE | Mountain Whitefish | 270 | 160 | 900228000438613 |
| OEM-MS | 1-Sep-2021 | 388247 | BE | Mountain Whitefish | 277 | 191 | 900228000462072 |
| OEM-MS | 1-Sep-2021 | 388248 | BE | Mountain Whitefish | 275 | 196 | 900228000462419 |
| OEM-MS | 1-Sep-2021 | 388249 | BE | Mountain Whitefish | 278 | 188 | 900228000462606 |
| OEM-MS | 1-Sep-2021 | 388250 | BE | Mountain Whitefish | 360 | 362 | 900230000204462 |
| OEM-MS | 1-Sep-2021 | 388251 | BE | Mountain Whitefish | 219 | 107 | 900228000463192 |
| OEM-MS | 1-Sep-2021 | 388252 | BE | Mountain Whitefish | 221 | 103 | 900228000462251 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (6 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-MS | 1-Sep-2021 | 388253 | BE | Mountain Whitefish | 317 | 257 | 900230000158495 |
| OEM-MS | 1-Sep-2021 | 388254 | BE | Mountain Whitefish | 264 | 155 | 900228000462051 |
| OEM-MS | 1-Sep-2021 | 388255 | BE | Large Scale Sucker | 564 | 1889 | 965000000090504 |
| OEM-MS | 1-Sep-2021 | 388256 | BE | Mountain Whitefish | 264 | 139 | 900228000462160 |
| OEM-MS | 1-Sep-2021 | 388257 | BE | Large Scale Sucker | 503 | 1448 | 900230000032842 |
| OEM-MS | 1-Sep-2021 | 388258 | BE | Mountain Whitefish | 296 | 200 | 900228000462847 |
| OEM-MS | 1-Sep-2021 | 388259 | BE | Mountain Whitefish | 288 | 174 | 900228000462441 |
| OEM-MS | 1-Sep-2021 | 388260 | BE | Mountain Whitefish | 326 | 250 | 900230000158595 |
| OEM-MS | 1-Sep-2021 | 388261 | BE | Mountain Whitefish | 292 | 188 | 900228000462829 |
| OEM-MS | 1-Sep-2021 | 388262 | BE | Mountain Whitefish | 265 | 139 | 900228000463026 |
| OEM-MS | 1-Sep-2021 | 388263 | BE | Mountain Whitefish | 314 | 188 | 900230000262721 |
| OEM-MS | 1-Sep-2021 | 388264 | BE | Mountain Whitefish | 256 | 141 | 900228000465473 |
| OEM-MS | 1-Sep-2021 | 388265 | BE | Bull Trout | 453 | 1225 | 900230000204354 |
| OEM-MS | 1-Sep-2021 | 388266 | BE | Mountain Whitefish | 296 | 217 | 900228000462787 |
| OEM-MS | 1-Sep-2021 | 388267 | BE | Longnose Sucker | 438 | 966 | 900230000055896 |
| OEM-MS | 1-Sep-2021 | 388268 | BE | Longnose Sucker | 407 | 754 | 900230000158978 |
| OEM-MS | 1-Sep-2021 | 388269 | BE | Longnose Sucker | 390 | 601 | 900230000158427 |
| OEM-MS | 1-Sep-2021 | 388270 | BE | Large Scale Sucker | 398 | 729 | 900230000159188 |
| OEM-MS | 1-Sep-2021 | 388271 | BE | Longnose Sucker | 344 | 501 | 900230000159160 |
| OEM-MS | 1-Sep-2021 | 388272 | BE | Longnose Sucker | 411 | 800 | 900230000158292 |
| OEM-MS | 1-Sep-2021 | 388273 | BE | Longnose Sucker | 389 | 670 | 900230000159103 |
| OEM-MS | 1-Sep-2021 | 388274 | BE | Longnose Sucker | 399 | 722 | 900230000158183 |
| OEM-MS | 1-Sep-2021 | 388275 | BE | Mountain Whitefish | 288 | 191 | 900228000348322 |
| OEM-MS | 1-Sep-2021 | 388276 | BE | Longnose Sucker | 395 | 749 | 900230000158634 |
| OEM-MS | 1-Sep-2021 | 388277 | BE | Longnose Sucker | 338 | 413 | 900230000158362 |
| OEM-MS | 1-Sep-2021 | 388278 | BE | Longnose Dace | 77 | 8 | |
| OEM-MS | 14-Sep-2021 | 383734 | BE | Walleye | 372 | 549 | 900230000159131 |
| OEM-MS | 14-Sep-2021 | 383735 | BE | Mountain Whitefish | 293 | 203 | 900228000464769 |
| OEM-MS | 14-Sep-2021 | 383736 | BE | Mountain Whitefish | 275 | 172 | 900228000294040 |
| OEM-MS | 14-Sep-2021 | 383737 | BE | Mountain Whitefish | 289 | 219 | 900228000464485 |
| OEM-MS | 14-Sep-2021 | 383738 | BE | Mountain Whitefish | 256 | 139 | 900228000460371 |
| OEM-MS | 14-Sep-2021 | 383739 | BE | Northern Pikeminnow | 390 | 648 | |
| OEM-MS | 14-Sep-2021 | 383740 | BE | Northern Pikeminnow | 341 | 408 | |
| OEM-MS | 14-Sep-2021 | 383741 | BE | Longnose Sucker | 417 | 829 | 900230000269248 |
| OEM-MS | 14-Sep-2021 | 383742 | BE | Longnose Sucker | 240 | 149 | 900228000461004 |
| OEM-MS | 14-Sep-2021 | 383743 | BE | Walleye | 420 | 828 | 900230000203409 |
| OEM-MS | 14-Sep-2021 | 383744 | BE | Mountain Whitefish | 308 | 236 | 900230000081801 |
| OEM-MS | 14-Sep-2021 | 383745 | BE | Longnose Sucker | 423 | 757 | 900230000269796 |
| OEM-MS | 14-Sep-2021 | 383746 | BE | Mountain Whitefish | 290 | 225 | 981098104937345 |
| OEM-MS | 14-Sep-2021 | 383747 | BE | Mountain Whitefish | 217 | 105 | 900228000465486 |
| OEM-MS | 14-Sep-2021 | 383748 | BE | Longnose Sucker | 432 | 1056 | 900230000269282 |
| OEM-MS | 14-Sep-2021 | 383749 | BE | Longnose Sucker | 346 | 473 | 900230000266541 |
| OEM-MS | 14-Sep-2021 | 383750 | BE | Mountain Whitefish | 310 | 214 | 900230000268538 |
| OEM-MS | 14-Sep-2021 | 383751 | BE | Mountain Whitefish | 282 | 227 | 900228000635978 |
| OEM-MS | 14-Sep-2021 | 383752 | BE | Longnose Sucker | 300 | 347 | 900230000269190 |
| OEM-MS | 14-Sep-2021 | 383753 | BE | Mountain Whitefish | 282 | 197 | 900228000635921 |
| OEM-MS | 14-Sep-2021 | 383754 | BE | Longnose Sucker | 290 | 276 | 900228000460487 |
| OEM-MS | 14-Sep-2021 | 383755 | BE | Mountain Whitefish | 290 | 193 | 900228000465641 |
| OEM-MS | 14-Sep-2021 | 383756 | BE | Mountain Whitefish | 325 | 472 | 900230000268945 |
| OEM-MS | 14-Sep-2021 | 383757 | BE | Mountain Whitefish | 289 | 188 | 900228000465887 |
| OEM-MS | 14-Sep-2021 | 383758 | BE | Mountain Whitefish | 290 | 183 | 900228000465937 |
| OEM-MS | 14-Sep-2021 | 383759 | BE | Mountain Whitefish | 264 | 159 | 900228000439692 |
| OEM-USC | 17-Aug-2021 | 383698 | BE | Mountain Whitefish | 384 | 431 | 900230000262129 |
| OEM-USC | 17-Aug-2021 | 383699 | BE | Mountain Whitefish | 318 | 236 | |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (7 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-USC | 17-Aug-2021 | 383700 | BE | Mountain Whitefish | 288 | 246 | 900228000438704 |
| OEM-USC | 17-Aug-2021 | 383701 | BE | Mountain Whitefish | 260 | 149 | 900228000462896 |
| OEM-USC | 17-Aug-2021 | 383702 | BE | Mountain Whitefish | 283 | 216 | 900228000460518 |
| OEM-USC | 17-Aug-2021 | 383703 | BE | Mountain Whitefish | 304 | 197 | 900230000266617 |
| OEM-USC | 17-Aug-2021 | 383704 | BE | Mountain Whitefish | 325 | 284 | |
| OEM-USC | 17-Aug-2021 | 383705 | BE | Mountain Whitefish | 258 | 169 | 900228000463109 |
| OEM-USC | 17-Aug-2021 | 383706 | BE | Mountain Whitefish | 328 | 254 | 900230000078157 |
| OEM-USC | 17-Aug-2021 | 383707 | BE | Mountain Whitefish | 328 | 339 | 900230000262228 |
| OEM-USC | 17-Aug-2021 | 383708 | BE | Mountain Whitefish | 316 | 255 | 900230000211669 |
| OEM-USC | 17-Aug-2021 | 383709 | BE | Mountain Whitefish | 267 | 187 | 900228000462654 |
| OEM-USC | 17-Aug-2021 | 383710 | BE | Mountain Whitefish | 298 | 219 | 900228000465175 |
| OEM-USC | 17-Aug-2021 | 383711 | BE | Mountain Whitefish | 265 | 151 | 900228000462378 |
| OEM-USC | 17-Aug-2021 | 383712 | BE | Mountain Whitefish | 295 | 189 | 900228000681087 |
| OEM-USC | 17-Aug-2021 | 383713 | BE | Mountain Whitefish | 275 | 167 | 900228000462585 |
| OEM-USC | 17-Aug-2021 | 383714 | BE | Mountain Whitefish | 334 | 271 | 900230000262999 |
| OEM-USC | 17-Aug-2021 | 383715 | BE | Mountain Whitefish | 279 | 202 | 900228000465101 |
| OEM-USC | 17-Aug-2021 | 383716 | BE | Mountain Whitefish | 139 | 28 | 900226001222354 |
| OEM-USC | 17-Aug-2021 | 383717 | BE | Mountain Whitefish | 276 | 165 | 900228000462691 |
| OEM-USC | 17-Aug-2021 | 383718 | BE | Mountain Whitefish | 266 | 130 | |
| OEM-USC | 17-Aug-2021 | 383719 | BE | Mountain Whitefish | 186 | 85 | 900226001222324 |
| OEM-USC | 17-Aug-2021 | 383720 | BE | Mountain Whitefish | 70 | 3 | |
| OEM-USC | 17-Aug-2021 | 383721 | BE | Longnose Sucker | 415 | 705 | |
| OEM-USC | 17-Aug-2021 | 383722 | BE | White Sucker | 390 | 652 | 900230000262162 |
| OEM-USC | 17-Aug-2021 | 383723 | BE | Longnose Sucker | 424 | 972 | 900230000262961 |
| OEM-USC | 17-Aug-2021 | 383724 | BE | White Sucker | 380 | 688 | 900230000262306 |
| OEM-USC | 17-Aug-2021 | 383725 | BE | Longnose Sucker | 410 | 871 | 900230000262746 |
| OEM-USC | 17-Aug-2021 | 383726 | BE | Large Scale Sucker | 480 | 1354 | 900228000586721 |
| OEM-USC | 17-Aug-2021 | 383727 | BE | White Sucker | 359 | 545 | 900230000262265 |
| OEM-USC | 17-Aug-2021 | 383728 | BE | Large Scale Sucker | 476 | 1174 | 900230000262134 |
| OEM-USC | 17-Aug-2021 | 383729 | BE | Large Scale Sucker | 456 | 1167 | 900230000262638 |
| OEM-USC | 17-Aug-2021 | 383730 | BE | Longnose Sucker | 315 | 374 | 900230000262410 |
| OEM-USC | 17-Aug-2021 | 383731 | BE | Walleye | 375 | 629 | 900230000262013 |
| OEM-USC | 17-Aug-2021 | 383732 | BE | Longnose Sucker | 412 | 803 | 900230000262895 |
| OEM-USC | 17-Aug-2021 | 383733 | BE | Longnose Sucker | 332 | 436 | 900230000262107 |
| OEM-USC | 17-Aug-2021 | 383734 | BE | Large Scale Sucker | 221 | 128 | 900228000463099 |
| OEM-USC | 17-Aug-2021 | 383735 | BE | Longnose Sucker | 235 | 171 | 900228000464764 |
| OEM-USC | 17-Aug-2021 | 383736 | BE | Longnose Sucker | 175 | 65 | |
| OEM-USC | 17-Aug-2021 | 383737 | BE | Northern Pike | 526 | 1254 | 981098104794991 |
| OEM-USC | 24-Aug-2021 | 385674 | BE | Mountain Whitefish | 295 | 186 | 900228000462795 |
| OEM-USC | 24-Aug-2021 | 385675 | BE | Mountain Whitefish | 341 | 268 | 900230000262359 |
| OEM-USC | 24-Aug-2021 | 385676 | BE | Lake Chub | 60 | 0 | |
| OEM-USC | 24-Aug-2021 | 385677 | BE | Mountain Whitefish | 306 | 207 | 900230000263421 |
| OEM-USC | 24-Aug-2021 | 385678 | BE | Mountain Whitefish | 282 | 178 | 900228000462200 |
| OEM-USC | 24-Aug-2021 | 385679 | BE | Mountain Whitefish | 326 | 247 | 981098106069607 |
| OEM-USC | 24-Aug-2021 | 385680 | BE | Mountain Whitefish | 76 | 6 | |
| OEM-USC | 24-Aug-2021 | 385681 | BE | Mountain Whitefish | 260 | 146 | 900228000462320 |
| OEM-USC | 24-Aug-2021 | 385682 | BE | Mountain Whitefish | 285 | 200 | 900228000463149 |
| OEM-USC | 24-Aug-2021 | 385683 | BE | Mountain Whitefish | 325 | 244 | 900230000263232 |
| OEM-USC | 24-Aug-2021 | 385684 | BE | Mountain Whitefish | 202 | 84 | 900228000462478 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (8 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-USC | 24-Aug-2021 | 385685 | BE | Mountain Whitefish | 273 | 124 | 900228000462050 |
| OEM-USC | 24-Aug-2021 | 385686 | BE | Mountain Whitefish | 258 | 145 | 900228000462582 |
| OEM-USC | 24-Aug-2021 | 385687 | BE | Mountain Whitefish | 182 | 59 | 900226001222334 |
| OEM-USC | 24-Aug-2021 | 385688 | BE | Mountain Whitefish | 309 | 231 | 900230000262498 |
| OEM-USC | 24-Aug-2021 | 385689 | BE | Mountain Whitefish | 175 | 53 | 900226001222263 |
| OEM-USC | 24-Aug-2021 | 385690 | BE | Mountain Whitefish | 264 | 145 | 900228000462652 |
| OEM-USC | 24-Aug-2021 | 385691 | BE | Mountain Whitefish | 268 | 234 | 900228000464506 |
| OEM-USC | 24-Aug-2021 | 385692 | BE | Mountain Whitefish | 140 | 26 | |
| OEM-USC | 24-Aug-2021 | 385693 | BE | Mountain Whitefish | 281 | 195 | 900228000462540 |
| OEM-USC | 24-Aug-2021 | 385694 | BE | Mountain Whitefish | 305 | 224 | 900230000263377 |
| OEM-USC | 24-Aug-2021 | 385695 | BE | Mountain Whitefish | 230 | 123 | 900228000465667 |
| OEM-USC | 24-Aug-2021 | 385696 | BE | Mountain Whitefish | 142 | 28 | |
| OEM-USC | 24-Aug-2021 | 385697 | BE | Mountain Whitefish | 244 | 143 | 900228000463143 |
| OEM-USC | 24-Aug-2021 | 385698 | BE | Mountain Whitefish | 266 | 128 | 900228000463018 |
| OEM-USC | 24-Aug-2021 | 385699 | BE | Mountain Whitefish | 256 | 167 | 900228000463151 |
| OEM-USC | 24-Aug-2021 | 385700 | BE | Mountain Whitefish | 343 | 327 | 900230000262387 |
| OEM-USC | 24-Aug-2021 | 385701 | BE | Mountain Whitefish | 256 | 140 | 900228000463216 |
| OEM-USC | 24-Aug-2021 | 385702 | BE | Mountain Whitefish | 277 | 175 | 900228000462082 |
| OEM-USC | 24-Aug-2021 | 385703 | BE | Mountain Whitefish | 257 | 147 | 900228000465938 |
| OEM-USC | 24-Aug-2021 | 385704 | BE | Mountain Whitefish | 296 | 233 | 900228000465216 |
| OEM-USC | 24-Aug-2021 | 385705 | BE | Mountain Whitefish | 276 | 152 | 900228000462229 |
| OEM-USC | 24-Aug-2021 | 385706 | BE | Mountain Whitefish | 345 | 326 | 900230000263998 |
| OEM-USC | 24-Aug-2021 | 385707 | BE | Mountain Whitefish | 260 | 157 | 900228000462636 |
| OEM-USC | 24-Aug-2021 | 385708 | BE | Mountain Whitefish | 306 | 185 | 900230000263835 |
| OEM-USC | 24-Aug-2021 | 385709 | BE | Mountain Whitefish | 270 | 203 | 900228000462936 |
| OEM-USC | 24-Aug-2021 | 385710 | BE | Mountain Whitefish | 77 | 0 | |
| OEM-USC | 24-Aug-2021 | 385711 | BE | Mountain Whitefish | 277 | 164 | 900228000463214 |
| OEM-USC | 24-Aug-2021 | 385712 | BE | Mountain Whitefish | 180 | 66 | 900226001222226 |
| OEM-USC | 24-Aug-2021 | 385713 | BE | Mountain Whitefish | 330 | 295 | 965000000086588 |
| OEM-USC | 24-Aug-2021 | 385714 | BE | Mountain Whitefish | 257 | 175 | 900228000465060 |
| OEM-USC | 24-Aug-2021 | 385715 | BE | Walleye | 420 | 930 | 900230000262046 |
| OEM-USC | 24-Aug-2021 | 385716 | BE | Mountain Whitefish | 316 | 281 | 900230000263901 |
| OEM-USC | 24-Aug-2021 | 385717 | BE | Mountain Whitefish | 296 | 197 | 900228000462804 |
| OEM-USC | 24-Aug-2021 | 385718 | BE | Mountain Whitefish | 286 | 182 | 900228000465470 |
| OEM-USC | 24-Aug-2021 | 385719 | BE | Mountain Whitefish | 316 | 260 | 900230000210665 |
| OEM-USC | 24-Aug-2021 | 385720 | BE | Mountain Whitefish | 279 | 202 | 900228000462489 |
| OEM-USC | 24-Aug-2021 | 385721 | BE | Mountain Whitefish | 272 | 171 | 900228000680670 |
| OEM-USC | 24-Aug-2021 | 385722 | BE | Mountain Whitefish | 274 | 186 | 900228000462838 |
| OEM-USC | 24-Aug-2021 | 385723 | BE | Longnose Sucker | 370 | 596 | 900230000263227 |
| OEM-USC | 24-Aug-2021 | 385724 | BE | Walleye | 465 | 1191 | 900228000462896 |
| OEM-USC | 24-Aug-2021 | 385725 | BE | Mountain Whitefish | 342 | 254 | 900230000262225 |
| OEM-USC | 24-Aug-2021 | 385726 | BE | Longnose Sucker | 263 | 224 | 900228000462708 |
| OEM-USC | 24-Aug-2021 | 385727 | BE | Large Scale Sucker | 290 | 273 | 900228000462837 |
| OEM-USC | 24-Aug-2021 | 385728 | BE | Mountain Whitefish | 276 | 143 | 900228000462086 |
| OEM-USC | 24-Aug-2021 | 385729 | BE | Mountain Whitefish | 308 | 248 | 900230000262629 |
| OEM-USC | 24-Aug-2021 | 385730 | BE | Mountain Whitefish | 309 | 287 | 900230000263042 |
| OEM-USC | 24-Aug-2021 | 385731 | BE | Mountain Whitefish | 262 | 155 | 900228000462272 |
| OEM-USC | 24-Aug-2021 | 385732 | BE | Longnose Sucker | 417 | 878 | 900230000263249 |
| OEM-USC | 24-Aug-2021 | 385733 | BE | Northern Pikeminnow | 394 | 622 | |
| OEM-USC | 24-Aug-2021 | 385734 | BE | Longnose Sucker | 432 | 890 | 900230000263292 |
| OEM-USC | 24-Aug-2021 | 385735 | BE | Longnose Sucker | 446 | 923 | 965000000078290 |
| OEM-USC | 24-Aug-2021 | 385736 | BE | Northern Pikeminnow | 269 | 266 | |
| OEM-USC | 24-Aug-2021 | 385737 | BE | Northern Pikeminnow | 211 | 101 | |
| OEM-USC | 24-Aug-2021 | 385738 | BE | Longnose Sucker | 393 | 773 | 900230000262560 |
| OEM-USC | 24-Aug-2021 | 385739 | BE | White Sucker | 246 | 174 | 900228000462903 |
| OEM-USC | 24-Aug-2021 | 385740 | BE | Longnose Sucker | 363 | 505 | 900230000263697 |
| OEM-USC | 24-Aug-2021 | 385741 | BE | Large Scale Sucker | 216 | 130 | 900228000463125 |
| OEM-USC | 24-Aug-2021 | 385742 | BE | Longnose Sucker | 236 | 137 | 900228000462432 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (9 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-USC | 24-Aug-2021 | 385743 | BE | Longnose Sucker | 237 | 159 | 900228000462646 |
| OEM-USC | 24-Aug-2021 | 385744 | BE | Large Scale Sucker | 209 | 99 | |
| OEM-USC | 24-Aug-2021 | 385745 | BE | Bull Trout | 269 | 188 | 900228000462030 |
| OEM-USC | 24-Aug-2021 | 385746 | BE | Longnose Sucker | 210 | 110 | 900228000462748 |
| OEM-USC | 24-Aug-2021 | 385747 | BE | Walleye | 292 | 277 | 900228000462135 |
| OEM-USC | 24-Aug-2021 | 385748 | BE | Slimy Sculpin | 70 | 0 | |
| OEM-USC | 24-Aug-2021 | 385749 | BE | Longnose Sucker | 87 | 6 | |
| OEM-USC | 1-Sep-2021 | 387982 | BE | Mountain Whitefish | 344 | 341 | 900230000158738 |
| OEM-USC | 1-Sep-2021 | 387983 | BE | Mountain Whitefish | 296 | 241 | 900228000462509 |
| OEM-USC | 1-Sep-2021 | 387984 | BE | Mountain Whitefish | 145 | 33 | |
| OEM-USC | 1-Sep-2021 | 387985 | BE | Mountain Whitefish | 278 | 176 | 900228000462724 |
| OEM-USC | 1-Sep-2021 | 387986 | BE | Mountain Whitefish | 270 | 153 | 900228000462879 |
| OEM-USC | 1-Sep-2021 | 387987 | BE | Mountain Whitefish | 243 | 152 | 900228000462858 |
| OEM-USC | 1-Sep-2021 | 387988 | BE | Mountain Whitefish | 306 | 210 | 900230000266532 |
| OEM-USC | 1-Sep-2021 | 387989 | BE | Mountain Whitefish | 257 | 136 | 900228000463219 |
| OEM-USC | 1-Sep-2021 | 387990 | BE | Mountain Whitefish | 310 | 226 | 900230000158744 |
| OEM-USC | 1-Sep-2021 | 387991 | BE | Mountain Whitefish | 335 | 300 | 900230000158796 |
| OEM-USC | 1-Sep-2021 | 387992 | BE | Mountain Whitefish | 263 | 159 | 900228000438891 |
| OEM-USC | 1-Sep-2021 | 387993 | BE | Mountain Whitefish | 290 | 255 | 900228000438704 |
| OEM-USC | 1-Sep-2021 | 387994 | BE | Mountain Whitefish | 311 | 220 | 900230000262629 |
| OEM-USC | 1-Sep-2021 | 387995 | BE | Mountain Whitefish | 290 | 175 | 900228000463148 |
| OEM-USC | 1-Sep-2021 | 387996 | BE | Mountain Whitefish | 358 | 352 | 900230000159089 |
| OEM-USC | 1-Sep-2021 | 387997 | BE | Mountain Whitefish | 266 | 197 | 900228000462005 |
| OEM-USC | 1-Sep-2021 | 387998 | BE | Mountain Whitefish | 290 | 205 | 900228000462986 |
| OEM-USC | 1-Sep-2021 | 387999 | BE | Mountain Whitefish | 280 | 178 | 900228000462588 |
| OEM-USC | 1-Sep-2021 | 388000 | BE | Mountain Whitefish | 215 | 101 | 900228000465954 |
| OEM-USC | 1-Sep-2021 | 388001 | BE | Mountain Whitefish | 303 | 234 | 900230000158824 |
| OEM-USC | 1-Sep-2021 | 388002 | BE | Mountain Whitefish | 268 | 148 | 900228000463069 |
| OEM-USC | 1-Sep-2021 | 388003 | BE | Mountain Whitefish | 306 | 234 | 900230000158111 |
| OEM-USC | 1-Sep-2021 | 388004 | BE | Mountain Whitefish | 294 | 206 | 900228000462888 |
| OEM-USC | 1-Sep-2021 | 388005 | BE | Mountain Whitefish | 309 | 284 | 900230000159162 |
| OEM-USC | 1-Sep-2021 | 388006 | BE | Northern Pikeminnow | 359 | 465 | |
| OEM-USC | 1-Sep-2021 | 388007 | BE | Mountain Whitefish | 280 | 158 | 900228000462743 |
| OEM-USC | 1-Sep-2021 | 388008 | BE | Large Scale Sucker | 416 | 860 | 900230000159065 |
| OEM-USC | 1-Sep-2021 | 388009 | BE | Longnose Sucker | 306 | 307 | 900230000159311 |
| OEM-USC | 1-Sep-2021 | 388010 | BE | Mountain Whitefish | 330 | 306 | 900230000158846 |
| OEM-USC | 1-Sep-2021 | 388011 | BE | Longnose Sucker | 376 | 576 | 900230000159090 |
| OEM-USC | 1-Sep-2021 | 388012 | BE | Mountain Whitefish | 321 | 271 | 900230000158944 |
| OEM-USC | 1-Sep-2021 | 388013 | BE | Large Scale Sucker | 241 | 171 | 900228000462407 |
| OEM-USC | 1-Sep-2021 | 388014 | BE | Mountain Whitefish | 175 | 50 | 900226001222257 |
| OEM-USC | 1-Sep-2021 | 388015 | BE | Mountain Whitefish | 255 | 130 | 900228000462287 |
| OEM-USC | 1-Sep-2021 | 388016 | BE | Longnose Sucker | 262 | 178 | 900228000463171 |
| OEM-USC | 1-Sep-2021 | 388017 | BE | Large Scale Sucker | 450 | 987 | 981098106071531 |
| OEM-USC | 1-Sep-2021 | 388018 | BE | Mountain Whitefish | 303 | 201 | 900230000158911 |
| OEM-USC | 1-Sep-2021 | 388019 | BE | Large Scale Sucker | 461 | 1310 | 900230000124506 |
| OEM-USC | 1-Sep-2021 | 388020 | BE | Longnose Sucker | 445 | 1014 | 900230000159020 |
| OEM-USC | 1-Sep-2021 | 388021 | BE | Large Scale Sucker | 398 | 730 | 900230000159245 |
| OEM-USC | 1-Sep-2021 | 388022 | BE | Walleye | 411 | 784 | 900230000158640 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (10 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-USC | 1-Sep-2021 | 388023 | BE | Large Scale Sucker | 464 | 1192 | 900230000159037 |
| OEM-USC | 1-Sep-2021 | 388024 | BE | Mountain Whitefish | 162 | 43 | 900226001222343 |
| OEM-USC | 1-Sep-2021 | 388025 | BE | Bull Trout | 518 | 1701 | 900230000158819 |
| OEM-USC | 1-Sep-2021 | 388026 | BE | Walleye | 376 | 598 | 900230000159189 |
| OEM-USC | 1-Sep-2021 | 388027 | BE | Longnose Sucker | 334 | 366 | |
| OEM-USC | 1-Sep-2021 | 388028 | BE | Mountain Whitefish | 188 | 79 | 900226001222315 |
| OEM-USC | 1-Sep-2021 | 388029 | BE | Longnose Sucker | 254 | 195 | 900228000462081 |
| OEM-USC | 1-Sep-2021 | 388030 | BE | Walleye | 368 | 555 | 900230000159131 |
| OEM-USC | 1-Sep-2021 | 388031 | BE | Large Scale Sucker | 457 | 1169 | 900230000158976 |
| OEM-USC | 1-Sep-2021 | 388032 | BE | Walleye | 424 | 810 | 900230000159165 |
| OEM-USC | 1-Sep-2021 | 388033 | BE | White Sucker | 382 | 591 | 900230000158843 |
| OEM-USC | 1-Sep-2021 | 388034 | BE | Large Scale Sucker | 468 | 1139 | 900230000158725 |
| OEM-USC | 1-Sep-2021 | 388035 | BE | Longnose Sucker | 351 | 497 | 900230000158888 |
| OEM-USC | 1-Sep-2021 | 388036 | BE | Large Scale Sucker | 524 | 1689 | 900230000159080 |
| OEM-USC | 1-Sep-2021 | 388037 | BE | Bull Trout | 268 | 179 | 900228000462030 |
| OEM-USC | 1-Sep-2021 | 388038 | BE | Walleye | 401 | 714 | 900230000159276 |
| OEM-USC | 1-Sep-2021 | 388039 | BE | Large Scale Sucker | 403 | 741 | 900230000158098 |
| OEM-USC | 1-Sep-2021 | 388040 | BE | Longnose Sucker | 243 | 153 | 900228000465852 |
| OEM-USC | 1-Sep-2021 | 388041 | BE | Large Scale Sucker | 230 | 135 | 900228000463102 |
| OEM-USC | 1-Sep-2021 | 388042 | BE | Large Scale Sucker | 455 | 1030 | 900230000080516 |
| OEM-USC | 1-Sep-2021 | 388043 | BE | White Sucker | 365 | 649 | 900230000159219 |
| OEM-USC | 1-Sep-2021 | 388044 | BE | White Sucker | 258 | 185 | 900228000462900 |
| OEM-USC | 1-Sep-2021 | 388045 | BE | Large Scale Sucker | 394 | 788 | 900230000033045 |
| OEM-USC | 1-Sep-2021 | 388046 | BE | Large Scale Sucker | 458 | 1190 | 900230000159241 |
| OEM-USC | 1-Sep-2021 | 388047 | BE | Large Scale Sucker | 341 | 479 | 900230000158011 |
| OEM-USC | 1-Sep-2021 | 388048 | BE | Large Scale Sucker | 456 | 992 | 900230000158958 |
| OEM-USC | 1-Sep-2021 | 388049 | BE | Longnose Sucker | 210 | 100 | 900228000462666 |
| OEM-USC | 1-Sep-2021 | 388050 | BE | White Sucker | 434 | 950 | 900230000158820 |
| OEM-USC | 1-Sep-2021 | 388051 | BE | Large Scale Sucker | 468 | 1149 | |
| OEM-USC | 1-Sep-2021 | 388052 | BE | Longnose Sucker | 308 | 345 | 900230000159175 |
| OEM-USC | 1-Sep-2021 | 388053 | BE | Northern Pikeminnow | 197 | 83 | |
| OEM-USC | 1-Sep-2021 | 388054 | BE | White Sucker | 412 | 791 | 900230000158115 |
| OEM-USC | 1-Sep-2021 | 388055 | BE | Large Scale Sucker | 289 | 263 | 900228000438682 |
| OEM-USC | 1-Sep-2021 | 388056 | BE | Large Scale Sucker | 222 | 121 | 900228000462283 |
| OEM-USC | 1-Sep-2021 | 388057 | BE | Large Scale Sucker | 256 | 220 | 900228000462262 |
| OEM-USC | 1-Sep-2021 | 388058 | BE | Longnose Sucker | 248 | 173 | 900228000463012 |
| OEM-USC | 1-Sep-2021 | 388059 | BE | Longnose Sucker | 212 | 105 | 900228000462333 |
| OEM-USC | 1-Sep-2021 | 388060 | BE | Longnose Sucker | 204 | 89 | 900228000465343 |
| OEM-USC | 1-Sep-2021 | 388061 | BE | Northern Pikeminnow | 186 | 69 | |
| OEM-USC | 1-Sep-2021 | 388062 | BE | Longnose Sucker | 243 | 169 | 900228000462004 |
| OEM-USC | 15-Sep-2021 | 383761 | BE | Mountain Whitefish | 279 | 174 | |
| OEM-USC | 15-Sep-2021 | 383762 | BE | Northern Pike | 660 | 2079 | 900230000211763 |
| OEM-USC | 15-Sep-2021 | 383763 | BE | Large Scale Sucker | 436 | 1041 | 900230000269062 |
| OEM-USC | 15-Sep-2021 | 383764 | BE | Longnose Sucker | 387 | 674 | 900230000268321 |
| OEM-USC | 15-Sep-2021 | 383765 | BE | Longnose Sucker | 224 | 116 | 900228000460951 |
| OEM-USC | 15-Sep-2021 | 383766 | BE | Mountain Whitefish | 263 | 150 | 900228000464577 |
| OEM-USC | 15-Sep-2021 | 383767 | BE | Mountain Whitefish | 319 | 238 | 900230000268797 |
| OEM-USC | 15-Sep-2021 | 383768 | BE | Mountain Whitefish | 335 | 309 | 900230000205830 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (11 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| OEM-USC | 15-Sep-2021 | 383769 | BE | Mountain Whitefish | 225 | 113 | 900228000460813 |
| OEM-USC | 15-Sep-2021 | 383770 | BE | Longnose Sucker | 313 | 314 | 900230000269287 |
| OEM-USC | 15-Sep-2021 | 383771 | BE | Mountain Whitefish | 265 | 140 | 900228000460439 |
| OEM-USC | 15-Sep-2021 | 383772 | BE | Mountain Whitefish | 288 | 278 | 900228000460912 |
| OEM-USC | 15-Sep-2021 | 383773 | BE | Mountain Whitefish | 90 | 3 | |
| OEM-USC | 15-Sep-2021 | 383774 | BE | Mountain Whitefish | 250 | 133 | 900228000460515 |
| OEM-USC | 15-Sep-2021 | 383775 | BE | Mountain Whitefish | 264 | 179 | 900228000439153 |
| OEM-USC | 15-Sep-2021 | 383776 | BE | Large Scale Sucker | 404 | 893 | 900230000206704 |
| OEM-USC | 15-Sep-2021 | 383777 | BE | Mountain Whitefish | 270 | 207 | 900228000461823 |
| OEM-USC | 15-Sep-2021 | 383778 | BE | Mountain Whitefish | 280 | 191 | 900228000461795 |
| OEM-USC | 15-Sep-2021 | 383779 | BE | Mountain Whitefish | 270 | 143 | 900228000460478 |
| OEM-USC | 15-Sep-2021 | 383780 | BE | Mountain Whitefish | 157 | 38 | 900226001622171 |
| OEM-USC | 15-Sep-2021 | 383781 | BE | Mountain Whitefish | 325 | 268 | 900230000266567 |
| OEM-USC | 15-Sep-2021 | 383782 | BE | Northern Pikeminnow | 175 | 45 | |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 22 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 23 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 24 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 25 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 26 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 27 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 28 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 30 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 31 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 35 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 40 | (blank) | (blank) |
| PCR-BP01 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 41 | (blank) | (blank) |
| PCR-BP01 | 25-Oct-2021 | 213320 | EF | Slimy Sculpin | 36 | (blank) | |
| PCR-BP01 | 25-Oct-2021 | 213321 | EF | Slimy Sculpin | 61 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213322 | EF | Longnose Sucker | 60 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213323 | EF | Prickly Sculpin | 64 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213324 | EF | Longnose Sucker | 75 | 3 | |
| PCR-BP01 | 25-Oct-2021 | 213325 | EF | Slimy Sculpin | 69 | 4 | |
| PCR-BP01 | 25-Oct-2021 | 213326 | EF | Slimy Sculpin | 76 | 4 | |
| PCR-BP01 | 25-Oct-2021 | 213327 | EF | Longnose Sucker | 56 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213328 | EF | Longnose Sucker | 60 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213329 | EF | Lake Chub | 56 | 1 | |
| PCR-BP01 | 25-Oct-2021 | 213330 | EF | Longnose Sucker | 55 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213331 | EF | Lake Chub | 50 | 1 | |
| PCR-BP01 | 25-Oct-2021 | 213332 | EF | Longnose Sucker | 60 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213333 | EF | Longnose Sucker | 64 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213334 | EF | Longnose Sucker | 59 | 2 | |
| PCR-BP01 | 25-Oct-2021 | 213335 | EF | Slimy Sculpin | 61 | 1 | |
| PCR-BP01 | 25-Oct-2021 | 213336 | EF | Prickly Sculpin | 40 | (blank) | |
| PCR-BP01 | 25-Oct-2021 | 213337 | EF | Slimy Sculpin | 38 | (blank) | |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Lake Chub | 58 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Lake Chub | 61 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Lake Chub | 64 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 26 | (blank) | (blank) |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (12 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Longnose Dace | 28 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Longnose Sucker | 63 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Redside Shiner | 59 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | Slimy Sculpin | 68 | (blank) | (blank) |
| PCR-BP03 | 26-Sep-2021 | (blank) | EF | White Sucker | 49 | (blank) | (blank) |
| PCR-BP03 | 25-Oct-2021 | 213278 | EF | Large Scale Sucker | 103 | 11 | |
| PCR-BP03 | 25-Oct-2021 | 213279 | EF | Burbot | 95 | 4 | |
| PCR-BP03 | 25-Oct-2021 | 213280 | EF | Slimy Sculpin | 80 | 4.5 | |
| PCR-BP03 | 25-Oct-2021 | 213281 | EF | Longnose Sucker | 80 | 4 | |
| PCR-BP03 | 25-Oct-2021 | 213282 | EF | Slimy Sculpin | 73 | 3.5 | |
| PCR-BP03 | 25-Oct-2021 | 213283 | EF | Slimy Sculpin | 71 | 3.5 | |
| PCR-BP03 | 25-Oct-2021 | 213284 | EF | Longnose Sucker | 67 | 3 | |
| PCR-BP03 | 25-Oct-2021 | 213285 | EF | Longnose Sucker | 68 | 3 | |
| PCR-BP03 | 25-Oct-2021 | 213286 | EF | Slimy Sculpin | 63 | 2 | |
| PCR-BP03 | 25-Oct-2021 | 213287 | EF | Longnose Sucker | 58 | 2 | |
| PCR-BP03 | 25-Oct-2021 | 213288 | EF | Longnose Sucker | 53 | 1.5 | |
| PCR-BP03 | 25-Oct-2021 | 213289 | EF | Slimy Sculpin | 35 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213290 | EF | Slimy Sculpin | 42 | 1 | |
| PCR-BP03 | 25-Oct-2021 | 213291 | EF | Longnose Dace | 41 | 1 | |
| PCR-BP03 | 25-Oct-2021 | 213292 | EF | Slimy Sculpin | 36 | 1 | |
| PCR-BP03 | 25-Oct-2021 | 213293 | EF | Slimy Sculpin | 40 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213294 | EF | Slimy Sculpin | 35 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213295 | EF | Slimy Sculpin | 34 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213296 | EF | Slimy Sculpin | 35 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213297 | EF | Slimy Sculpin | 29 | (blank) | |
| PCR-BP03 | 25-Oct-2021 | 213298 | EF | Sucker spp. | 33 | (blank) | |
| PCR-BP03 | 25-Oct-2021 | 213299 | EF | Slimy Sculpin | 36 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213300 | EF | Slimy Sculpin | 32 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213301 | EF | Slimy Sculpin | 35 | 0.5 | |
| PCR-BP03 | 25-Oct-2021 | 213302 | EF | Slimy Sculpin | 41 | 1 | |
| PCR-OCEF02 | 5-Aug-2021 | 208659 | EF | Longnose Sucker | 85 | 5 | |
| PCR-OCEF02 | 5-Aug-2021 | 208660 | EF | Spottail Shiner | 54 | 1 | |
| PCR-OCEF02 | 5-Aug-2021 | 208661 | EF | Redside Shiner | 87 | 7 | |
| PCR-OCEF02 | 5-Aug-2021 | 208662 | EF | Prickly Sculpin | 52 | 1 | |
| PCR-OCEF02 | 5-Aug-2021 | 208663 | EF | Redside Shiner | 98 | 10 | |
| PCR-OCEF02 | 5-Aug-2021 | 208664 | EF | Prickly Sculpin | 52 | 1 | |
| PCR-OCEF02 | 5-Aug-2021 | 208665 | EF | Slimy Sculpin | 42 | 1 | |
| PCR-OCEF02 | 5-Aug-2021 | 208666 | EF | Burbot | 113 | 8 | 900226001221112 |
| PCR-OCEF02 | 5-Aug-2021 | 208667 | EF | Burbot | 117 | 8 | 900226001617636 |
| PCR-OCEF02 | 25-Oct-2021 | 213305 | EF | Longnose Sucker | 55 | 2 | |
| PCR-OCEF02 | 25-Oct-2021 | 213306 | EF | Longnose Sucker | 57 | 2 | |
| PCR-OCEF02 | 25-Oct-2021 | 213307 | EF | Lake Chub | 59 | 2 | |
| PCR-OCEF02 | 25-Oct-2021 | 213308 | EF | Longnose Dace | 31 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213309 | EF | Longnose Sucker | 64 | 2 | |
| PCR-OCEF02 | 25-Oct-2021 | 213310 | EF | Slimy Sculpin | 36 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213311 | EF | Longnose Dace | 32 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213312 | EF | Slimy Sculpin | 42 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213313 | EF | Lake Chub | 54 | 1 | |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (13 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCEF02 | 25-Oct-2021 | 213314 | EF | Lake Chub | 54 | 2 | |
| PCR-OCEF02 | 25-Oct-2021 | 213315 | EF | Longnose Dace | 34 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213316 | EF | Longnose Dace | 25 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213317 | EF | Longnose Dace | 29 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213318 | EF | Longnose Dace | 31 | (blank) | |
| PCR-OCEF02 | 25-Oct-2021 | 213319 | EF | Slimy Sculpin | 36 | (blank) | |
| PCR-OCEF03 | 5-Aug-2021 | 208752 | EF | Longnose Dace | 71 | 3 | |
| PCR-OCEF03 | 5-Aug-2021 | 208753 | EF | Longnose Dace | 60 | 3 | |
| PCR-OCEF03 | 5-Aug-2021 | 208754 | EF | Slimy Sculpin | 75 | 4 | |
| PCR-OCEF03 | 5-Aug-2021 | 208755 | EF | Longnose Dace | 53 | 1 | |
| PCR-OCEF03 | 5-Aug-2021 | 208756 | EF | Longnose Dace | 52 | 1 | |
| PCR-OCEF03 | 5-Aug-2021 | 208757 | EF | Longnose Sucker | 32 | (blank) | |
| PCR-OCEF03 | 5-Aug-2021 | 208758 | EF | Slimy Sculpin | 87 | 6 | |
| PCR-OCEF03 | 5-Aug-2021 | 208759 | EF | Longnose Dace | 48 | 1 | |
| PCR-OCEF03 | 5-Aug-2021 | 208760 | EF | Longnose Dace | 81 | 5 | |
| PCR-OCEF03 | 5-Aug-2021 | 208761 | EF | Longnose Dace | 65 | 3 | |
| PCR-OCEF03 | 5-Aug-2021 | 208762 | EF | Longnose Dace | 60 | 2 | |
| PCR-OCEF03 | 5-Aug-2021 | 208763 | EF | Longnose Dace | 52 | 1 | |
| PCR-OCEF03 | 25-Oct-2021 | 213268 | EF | Slimy Sculpin | 45 | 0.5 | |
| PCR-OCEF03 | 25-Oct-2021 | 213269 | EF | Slimy Sculpin | 40 | 0.5 | |
| PCR-OCEF03 | 25-Oct-2021 | 213270 | EF | Slimy Sculpin | 35 | (blank) | |
| PCR-OCEF03 | 25-Oct-2021 | 213271 | EF | Slimy Sculpin | 63 | 2 | |
| PCR-OCEF03 | 25-Oct-2021 | 213272 | EF | Slimy Sculpin | 40 | 0.5 | |
| PCR-OCEF03 | 25-Oct-2021 | 213273 | EF | Slimy Sculpin | 36 | 0.5 | |
| PCR-OCEF03 | 25-Oct-2021 | 213274 | EF | Slimy Sculpin | 65 | 2.5 | |
| PCR-OCEF03 | 25-Oct-2021 | 213275 | EF | Longnose Sucker | 51 | 1.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213491 | EF | Slimy Sculpin | 33 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213492 | EF | Longnose Sucker | 72 | 3 | |
| PCR-OCEF04 | 26-Oct-2021 | 213493 | EF | Longnose Sucker | 74 | 4 | |
| PCR-OCEF04 | 26-Oct-2021 | 213494 | EF | Large Scale Sucker | 62 | 1.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213495 | EF | Redside Shiner | 70 | 3 | |
| PCR-OCEF04 | 26-Oct-2021 | 213496 | EF | Large Scale Sucker | 60 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213497 | EF | Longnose Dace | 26 | (blank) | |
| PCR-OCEF04 | 26-Oct-2021 | 213498 | EF | Large Scale Sucker | 47 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213499 | EF | Large Scale Sucker | 52 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213500 | EF | Large Scale Sucker | 92 | 7 | |
| PCR-OCEF04 | 26-Oct-2021 | 213501 | EF | Slimy Sculpin | 73 | 3.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213502 | EF | Slimy Sculpin | 72 | 3 | |
| PCR-OCEF04 | 26-Oct-2021 | 213503 | EF | Large Scale Sucker | 60 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213504 | EF | Slimy Sculpin | 62 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213505 | EF | Large Scale Sucker | 56 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213506 | EF | Slimy Sculpin | 40 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213507 | EF | Slimy Sculpin | 42 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213508 | EF | Longnose Dace | 25 | (blank) | |
| PCR-OCEF04 | 26-Oct-2021 | 213509 | EF | Large Scale Sucker | 59 | 1.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213510 | EF | Large Scale Sucker | 107 | 13.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213511 | EF | Large Scale Sucker | 59 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213512 | EF | Slimy Sculpin | 33 | 0.5 | |

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**Table 10. Continued (14 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCEF04 | 26-Oct-2021 | 213513 | EF | Slimy Sculpin | 62 | 1.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213514 | EF | Large Scale Sucker | 55 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213515 | EF | Slimy Sculpin | 41 | (blank) | |
| PCR-OCEF04 | 26-Oct-2021 | 213516 | EF | Slimy Sculpin | 33 | (blank) | |
| PCR-OCEF04 | 26-Oct-2021 | 213517 | EF | Longnose Dace | 63 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213518 | EF | Slimy Sculpin | 69 | 2.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213519 | EF | Large Scale Sucker | 59 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213520 | EF | Longnose Dace | 32 | (blank) | |
| PCR-OCEF04 | 26-Oct-2021 | 213521 | EF | Slimy Sculpin | 38 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213522 | EF | Longnose Dace | 35 | 0.5 | |
| PCR-OCEF04 | 26-Oct-2021 | 213523 | EF | Large Scale Sucker | 53 | 1 | |
| PCR-OCEF04 | 26-Oct-2021 | 213524 | EF | Slimy Sculpin | 40 | 0.5 | |
| PCR-OCEF05 | 5-Aug-2021 | 208732 | EF | Slimy Sculpin | 48 | 1 | |
| PCR-OCEF05 | 5-Aug-2021 | 208733 | EF | Slimy Sculpin | 48 | 1 | |
| PCR-OCEF05 | 5-Aug-2021 | 208734 | EF | Slimy Sculpin | 57 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208735 | EF | Prickly Sculpin | 38 | (blank) | |
| PCR-OCEF05 | 5-Aug-2021 | 208736 | EF | Slimy Sculpin | 61 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208737 | EF | Slimy Sculpin | 74 | 3 | |
| PCR-OCEF05 | 5-Aug-2021 | 208738 | EF | Longnose Sucker | 72 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208739 | EF | Slimy Sculpin | 92 | 8 | |
| PCR-OCEF05 | 5-Aug-2021 | 208740 | EF | Slimy Sculpin | 59 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208741 | EF | Slimy Sculpin | 58 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208742 | EF | Slimy Sculpin | 46 | 1 | |
| PCR-OCEF05 | 5-Aug-2021 | 208743 | EF | Slimy Sculpin | 48 | 1 | |
| PCR-OCEF05 | 5-Aug-2021 | 208744 | EF | Slimy Sculpin | 42 | (blank) | |
| PCR-OCEF05 | 5-Aug-2021 | 208745 | EF | Slimy Sculpin | 50 | 1 | |
| PCR-OCEF05 | 5-Aug-2021 | 208746 | EF | Slimy Sculpin | 61 | 2 | |
| PCR-OCEF05 | 5-Aug-2021 | 208747 | EF | Slimy Sculpin | 42 | (blank) | |
| PCR-OCEF05 | 5-Aug-2021 | 208748 | EF | Longnose Sucker | 119 | 19 | |
| PCR-OCEF05 | 5-Aug-2021 | 208749 | EF | Slimy Sculpin | 46 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208604 | EF | Northern Pike | 72 | 3 | |
| PCR-OCEF06 | 5-Aug-2021 | 208605 | EF | Northern Pike | 113 | 11 | 900226001221069 |
| PCR-OCEF06 | 5-Aug-2021 | 208606 | EF | Prickly Sculpin | 92 | 8 | |
| PCR-OCEF06 | 5-Aug-2021 | 208607 | EF | Slimy Sculpin | 65 | 3 | |
| PCR-OCEF06 | 5-Aug-2021 | 208608 | EF | Troutperch | 38 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208609 | EF | Longnose Dace | 52 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208610 | EF | Longnose Sucker | 39 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208611 | EF | Prickly Sculpin | 43 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208612 | EF | Prickly Sculpin | 43 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208613 | EF | Slimy Sculpin | 48 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208614 | EF | Slimy Sculpin | 63 | 2 | |
| PCR-OCEF06 | 5-Aug-2021 | 208615 | EF | Longnose Sucker | 83 | 6 | |
| PCR-OCEF06 | 5-Aug-2021 | 208616 | EF | Slimy Sculpin | 37 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208617 | EF | Longnose Dace | 77 | 5 | |
| PCR-OCEF06 | 5-Aug-2021 | 208618 | EF | Slimy Sculpin | 42 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208619 | EF | Slimy Sculpin | 89 | 7 | |
| PCR-OCEF06 | 5-Aug-2021 | 208620 | EF | Longnose Dace | 40 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208621 | EF | Longnose Sucker | 92 | 8 | |

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**Table 10. Continued (15 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCEF06 | 5-Aug-2021 | 208622 | EF | Northern Pike | 107 | 8 | 900226001221638 |
| PCR-OCEF06 | 5-Aug-2021 | 208623 | EF | Longnose Dace | 67 | 2 | |
| PCR-OCEF06 | 5-Aug-2021 | 208624 | EF | Slimy Sculpin | 52 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208625 | EF | Slimy Sculpin | 50 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208626 | EF | Slimy Sculpin | 84 | 7 | |
| PCR-OCEF06 | 5-Aug-2021 | 208627 | EF | Slimy Sculpin | 82 | 6 | |
| PCR-OCEF06 | 5-Aug-2021 | 208628 | EF | Slimy Sculpin | 79 | 6 | |
| PCR-OCEF06 | 5-Aug-2021 | 208629 | EF | Slimy Sculpin | 45 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208630 | EF | Slimy Sculpin | 75 | 4 | |
| PCR-OCEF06 | 5-Aug-2021 | 208631 | EF | Slimy Sculpin | 51 | 1 | |
| PCR-OCEF06 | 5-Aug-2021 | 208632 | EF | Slimy Sculpin | 69 | 4 | |
| PCR-OCEF06 | 5-Aug-2021 | 208633 | EF | Burbot | 268 | 37 | 900226001221126 |
| PCR-OCEF06 | 5-Aug-2021 | 208634 | EF | Burbot | 140 | 16 | 900226001221055 |
| PCR-OCEF06 | 5-Aug-2021 | 208635 | EF | Burbot | 137 | 13 | 900226001617805 |
| PCR-OCEF06 | 5-Aug-2021 | 208636 | EF | Burbot | 126 | 11 | 900226001220698 |
| PCR-OCEF06 | 5-Aug-2021 | 208637 | EF | Burbot | 125 | 10 | 900226001221006 |
| PCR-OCEF06 | 5-Aug-2021 | 208638 | EF | Burbot | 146 | 18 | 900226001617858 |
| PCR-OCEF06 | 5-Aug-2021 | 208639 | EF | Burbot | 136 | 12 | 900226001220619 |
| PCR-OCEF06 | 5-Aug-2021 | 208640 | EF | Burbot | 134 | 13 | |
| PCR-OCEF06 | 5-Aug-2021 | 208641 | EF | Burbot | 139 | 15 | 900226001221096 |
| PCR-OCEF06 | 5-Aug-2021 | 208642 | EF | Burbot | 137 | 17 | 900226001221602 |
| PCR-OCEF06 | 5-Aug-2021 | 208643 | EF | Slimy Sculpin | 43 | (blank) | |
| PCR-OCEF06 | 5-Aug-2021 | 208644 | EF | Prickly Sculpin | 83 | 6 | |
| PCR-OCEF06 | 5-Aug-2021 | 208645 | EF | Slimy Sculpin | 46 | 1 | |
| PCR-OCEF06 | 25-Oct-2021 | 213340 | EF | Longnose Sucker | 69 | 3 | |
| PCR-OCEF06 | 25-Oct-2021 | 213341 | EF | Redside Shiner | 42 | (blank) | |
| PCR-OCEF06 | 25-Oct-2021 | 213342 | EF | Redside Shiner | 85 | 6 | |
| PCR-OCEF06 | 25-Oct-2021 | 213343 | EF | Redside Shiner | 65 | 2 | |
| PCR-OCEF06 | 25-Oct-2021 | 213344 | EF | Redside Shiner | 62 | 2 | |
| PCR-OCEF06 | 25-Oct-2021 | 213345 | EF | Redside Shiner | 46 | (blank) | |
| PCR-OCEF06 | 25-Oct-2021 | 213346 | EF | Longnose Sucker | 55 | 2 | |
| PCR-OCEF06 | 25-Oct-2021 | 213347 | EF | Longnose Sucker | 60 | 2 | |
| PCR-OCEF06 | 25-Oct-2021 | 213348 | EF | Longnose Sucker | 43 | (blank) | |
| PCR-OCEF06 | 25-Oct-2021 | 213349 | EF | Longnose Sucker | 67 | 3 | |
| PCR-OCEF06 | 25-Oct-2021 | 213350 | EF | Lake Chub | 90 | 9 | |
| PCR-OCEF06 | 25-Oct-2021 | 213351 | EF | Slimy Sculpin | 60 | 2 | |
| PCR-OCEF06 | 25-Oct-2021 | 213352 | EF | Burbot | 132 | 9 | |
| PCR-OCEF07 | 5-Aug-2021 | 208683 | EF | Longnose Dace | 24 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208684 | EF | Longnose Sucker | 23 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208685 | EF | Longnose Dace | 26 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208686 | EF | Longnose Sucker | 22 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208687 | EF | Longnose Dace | 23 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208688 | EF | Longnose Dace | 23 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208689 | EF | Longnose Sucker | 40 | 2 | |
| PCR-OCEF07 | 5-Aug-2021 | 208690 | EF | Longnose Dace | 22 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208691 | EF | Longnose Dace | 22 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208692 | EF | Longnose Dace | 53 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208693 | EF | Longnose Dace | 49 | 1 | |

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**Table 10. Continued (16 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCEF07 | 5-Aug-2021 | 208694 | EF | Longnose Dace | 41 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208695 | EF | Slimy Sculpin | 47 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208696 | EF | Slimy Sculpin | 48 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208697 | EF | Slimy Sculpin | 62 | 2 | |
| PCR-OCEF07 | 5-Aug-2021 | 208698 | EF | Longnose Dace | 53 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208699 | EF | Longnose Dace | 25 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208700 | EF | Longnose Dace | 40 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208701 | EF | Longnose Dace | 43 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208702 | EF | Longnose Dace | 54 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208703 | EF | Longnose Dace | 55 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208704 | EF | Slimy Sculpin | 43 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208705 | EF | Longnose Dace | 49 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208706 | EF | Longnose Dace | 38 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208707 | EF | Longnose Dace | 44 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208708 | EF | Slimy Sculpin | 58 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208709 | EF | Slimy Sculpin | 53 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208710 | EF | Slimy Sculpin | 60 | 2 | |
| PCR-OCEF07 | 5-Aug-2021 | 208711 | EF | Longnose Dace | 52 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208712 | EF | Slimy Sculpin | 42 | (blank) | |
| PCR-OCEF07 | 5-Aug-2021 | 208724 | EF | Slimy Sculpin | 56 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208725 | EF | Longnose Dace | 48 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208726 | EF | Slimy Sculpin | 45 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208727 | EF | Slimy Sculpin | 49 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208728 | EF | Longnose Dace | 50 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208729 | EF | Slimy Sculpin | 44 | 1 | |
| PCR-OCEF07 | 5-Aug-2021 | 208730 | EF | Lake Chub | 18 | (blank) | |
| PCR-OCES01 | 5-Aug-2021 | 208468 | ES | White Sucker | 221 | 120 | 900228000465001 |
| PCR-OCES01 | 31-Oct-2021 | (blank) | ES | White Sucker | 200 | 98 | 900228000461585 |
| PCR-OCES03 | 4-Aug-2021 | 208669 | ES | Walleye | 408 | 762 | 900230000033856 |
| PCR-OCES03 | 4-Aug-2021 | 208670 | ES | White Sucker | 400 | 826 | 900230000266665 |
| PCR-OCES03 | 4-Aug-2021 | 208671 | ES | Walleye | 560 | 1922 | 900230000266582 |
| PCR-OCES03 | 4-Aug-2021 | 208672 | ES | White Sucker | 326 | 439 | 900230000266619 |
| PCR-OCES03 | 4-Aug-2021 | 208673 | ES | Walleye | 433 | 815 | 900230000266580 |
| PCR-OCES03 | 4-Aug-2021 | 208674 | ES | Yellow Perch | 85 | 10 | |
| PCR-OCES04 | 4-Aug-2021 | 208652 | ES | Northern Pike | 573 | 1535 | 900230000266518 |
| PCR-OCES04 | 4-Aug-2021 | 208653 | ES | White Sucker | 452 | 1104 | 900230000266506 |
| PCR-OCES04 | 4-Aug-2021 | 208654 | ES | White Sucker | 381 | 915 | 900230000266528 |
| PCR-OCES04 | 4-Aug-2021 | 208655 | ES | Yellow Perch | 91 | 14 | |
| PCR-OCES04 | 4-Aug-2021 | 208656 | ES | Yellow Perch | 125 | 27 | |
| PCR-OCES04 | 4-Aug-2021 | 208657 | ES | Walleye | 572 | 1979 | 900230000266519 |
| PCR-OCES04 | 4-Aug-2021 | 208658 | ES | Yellow Perch | 94 | 6 | |
| PCR-OCES04 | 31-Oct-2021 | (blank) | ES | Burbot | 185 | 32 | 900226001221366 |
| PCR-OCES04 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 261 | 152 | 900228000679085 |
| PCR-OCES04 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 309 | 200 | 981098104939870 |
| PCR-OCES04 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 317 | 245 | 900230000268897 |
| PCR-OCES05 | 5-Aug-2021 | 208461 | ES | White Sucker | 202 | 109 | 900228000465271 |
| PCR-OCES05 | 5-Aug-2021 | 208462 | ES | White Sucker | 416 | 947 | 900230000266664 |
| PCR-OCES05 | 5-Aug-2021 | 208463 | ES | White Sucker | 426 | 867 | 900230000266508 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (17 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCES05 | 5-Aug-2021 | 208464 | ES | White Sucker | 361 | 584 | 900230000266581 |
| PCR-OCES05 | 5-Aug-2021 | 208465 | ES | Longnose Sucker | 254 | 213 | 900228000465541 |
| PCR-OCES05 | 5-Aug-2021 | 208466 | ES | White Sucker | 379 | 677 | 900230000266592 |
| PCR-OCES05 | 5-Aug-2021 | 208519 | ES | Mountain Whitefish | 282 | 180 | 900228000465861 |
| PCR-OCES05 | 5-Aug-2021 | 208520 | ES | Mountain Whitefish | 363 | 352 | 900230000204503 |
| PCR-OCES05 | 5-Aug-2021 | 208521 | ES | Mountain Whitefish | 315 | 244 | 900228000464528 |
| PCR-OCES05 | 5-Aug-2021 | 208522 | ES | Mountain Whitefish | 252 | 193 | 900228000465834 |
| PCR-OCES05 | 5-Aug-2021 | 208523 | ES | Mountain Whitefish | 410 | 600 | 900230000205164 |
| PCR-OCES05 | 5-Aug-2021 | 208524 | ES | Mountain Whitefish | 275 | 173 | 900228000465675 |
| PCR-OCES05 | 5-Aug-2021 | 208525 | ES | Mountain Whitefish | 351 | 344 | 900230000266523 |
| PCR-OCES05 | 5-Aug-2021 | 208526 | ES | Mountain Whitefish | 329 | 298 | 900230000269571 |
| PCR-OCES05 | 5-Aug-2021 | 208527 | ES | Longnose Sucker | 455 | 1124 | 900230000266536 |
| PCR-OCES05 | 5-Aug-2021 | 208529 | ES | Longnose Sucker | 411 | 720 | 900230000266511 |
| PCR-OCES05 | 5-Aug-2021 | 208530 | ES | White Sucker | 381 | 772 | 900230000266584 |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 42 | 0 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 43 | 1 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 46 | 1 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 54 | 2 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 54 | 3 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 278 | 179 | 900228000461976 |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 29 | 0 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 30 | 0 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 31 | 0 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 32 | 0 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 42 | 1 | |
| PCR-OCES05 | 31-Oct-2021 | (blank) | ES | White Sucker | 53 | 2 | |
| PCR-OCES06 | 5-Aug-2021 | 208450 | ES | Mountain Whitefish | 331 | 253 | 900230000269571 |
| PCR-OCES06 | 5-Aug-2021 | 208451 | ES | Mountain Whitefish | 308 | 265 | 900230000266504 |
| PCR-OCES06 | 5-Aug-2021 | 208452 | ES | Mountain Whitefish | 307 | 257 | 900230000266533 |
| PCR-OCES06 | 5-Aug-2021 | 208489 | ES | Mountain Whitefish | 358 | (blank) | 900230000266521 |
| PCR-OCES06 | 5-Aug-2021 | 208490 | ES | Mountain Whitefish | 269 | 181 | 900228000464916 |
| PCR-OCES06 | 5-Aug-2021 | 208491 | ES | Mountain Whitefish | 306 | 210 | 900230000266516 |
| PCR-OCES06 | 5-Aug-2021 | 208492 | ES | Mountain Whitefish | 261 | 168 | 900228000464813 |
| PCR-OCES06 | 5-Aug-2021 | 208493 | ES | Mountain Whitefish | 298 | 219 | 900230000266579 |
| PCR-OCES06 | 5-Aug-2021 | 208494 | ES | Mountain Whitefish | 268 | 195 | 900228000465605 |
| PCR-OCES06 | 5-Aug-2021 | 208495 | ES | Mountain Whitefish | 320 | 258 | 900230000266522 |
| PCR-OCES06 | 5-Aug-2021 | 208496 | ES | Mountain Whitefish | 329 | 309 | 900230000266585 |
| PCR-OCES06 | 5-Aug-2021 | 208497 | ES | Mountain Whitefish | 305 | 245 | 900230000266589 |
| PCR-OCES06 | 5-Aug-2021 | 208498 | ES | Mountain Whitefish | 331 | 270 | 900230000266502 |
| PCR-OCES06 | 5-Aug-2021 | 208499 | ES | Mountain Whitefish | 308 | 224 | 900230000266514 |
| PCR-OCES06 | 5-Aug-2021 | 208500 | ES | Mountain Whitefish | 340 | 340 | 900230000266527 |
| PCR-OCES06 | 5-Aug-2021 | 208501 | ES | Mountain Whitefish | 330 | 281 | 900230000266526 |
| PCR-OCES06 | 5-Aug-2021 | 208502 | ES | Longnose Sucker | 408 | 806 | 900230000205609 |
| PCR-OCES06 | 5-Aug-2021 | 208503 | ES | Longnose Sucker | 389 | 702 | 900230000206671 |
| PCR-OCES06 | 5-Aug-2021 | 208504 | ES | Mountain Whitefish | 280 | 287 | 900228000464762 |
| PCR-OCES06 | 5-Aug-2021 | 208505 | ES | White Sucker | 430 | 982 | 900230000266586 |
| PCR-OCES06 | 5-Aug-2021 | 208506 | ES | White Sucker | 424 | 981 | 900230000266596 |
| PCR-OCES06 | 5-Aug-2021 | 208507 | ES | Longnose Sucker | 496 | (blank) | 900230000266583 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (18 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCES06 | 5-Aug-2021 | 208508 | ES | White Sucker | 335 | 450 | 900230000266595 |
| PCR-OCES06 | 5-Aug-2021 | 208509 | ES | White Sucker | 203 | 206 | 900228000464784 |
| PCR-OCES06 | 5-Aug-2021 | 208510 | ES | White Sucker | 245 | 199 | 900228000465437 |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Lake Chub | 57 | 2 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Large Scale Sucker | 40 | 3 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Large Scale Sucker | 52 | 1 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Large Scale Sucker | 53 | 2 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 275 | 166 | 900228000460298 |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 316 | 268 | 900230000269213 |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 20 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 22 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 24 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 26 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 31 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 32 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 34 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 35 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 39 | 0 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 40 | 1 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 53 | 1 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 63 | 2 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 69 | 5 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Spottail Shiner | 39 | 1 | |
| PCR-OCES06 | 31-Oct-2021 | (blank) | ES | Spottail Shiner | 85 | 6 | |
| PCR-OCES07 | 5-Aug-2021 | 208469 | ES | Mountain Whitefish | 342 | 307 | 900230000266524 |
| PCR-OCES07 | 5-Aug-2021 | 208470 | ES | Mountain Whitefish | 300 | 198 | 900230000266538 |
| PCR-OCES07 | 5-Aug-2021 | 208471 | ES | Mountain Whitefish | 274 | 167 | 900228000465577 |
| PCR-OCES07 | 5-Aug-2021 | 208472 | ES | Mountain Whitefish | 300 | 218 | 900230000211400 |
| PCR-OCES07 | 5-Aug-2021 | 208473 | ES | Mountain Whitefish | 206 | 84 | 900228000464834 |
| PCR-OCES07 | 5-Aug-2021 | 208474 | ES | Mountain Whitefish | 310 | 229 | 900230000268505 |
| PCR-OCES07 | 5-Aug-2021 | 208475 | ES | Mountain Whitefish | 315 | (blank) | 900230000056658 |
| PCR-OCES07 | 5-Aug-2021 | 208476 | ES | Mountain Whitefish | 300 | 213 | 900228000464710 |
| PCR-OCES07 | 5-Aug-2021 | 208477 | ES | Mountain Whitefish | 334 | 311 | 900230000266525 |
| PCR-OCES07 | 5-Aug-2021 | 208478 | ES | Mountain Whitefish | 228 | 116 | 900228000464678 |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 44 | 1 | |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 47 | 1 | |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 98 | 8 | |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 270 | 157 | 900228000465128 |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 290 | 179 | 900228000464619 |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 56 | 2 | |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 63 | 3 | |
| PCR-OCES07 | 31-Oct-2021 | (blank) | ES | Slimy Sculpin | 83 | 5 | |
| PCR-OCES08 | 5-Aug-2021 | 208479 | ES | Mountain Whitefish | 336 | (blank) | 900230000266525 |
| PCR-OCES08 | 5-Aug-2021 | 208480 | ES | Mountain Whitefish | 293 | 190 | 900228000465727 |
| PCR-OCES08 | 5-Aug-2021 | 208481 | ES | Mountain Whitefish | 345 | 319 | 900230000207458 |
| PCR-OCES08 | 5-Aug-2021 | 208482 | ES | Mountain Whitefish | 342 | 316 | 900230000266524 |
| PCR-OCES08 | 5-Aug-2021 | 208483 | ES | Mountain Whitefish | 292 | 189 | 900228000465367 |
| PCR-OCES08 | 5-Aug-2021 | 208484 | ES | Mountain Whitefish | 329 | 268 | 900228000464636 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (19 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCES08 | 5-Aug-2021 | 208485 | ES | Mountain Whitefish | 295 | 225 | 900228000465019 |
| PCR-OCES08 | 5-Aug-2021 | 208486 | ES | Mountain Whitefish | 351 | 331 | 900230000203239 |
| PCR-OCES08 | 5-Aug-2021 | 208487 | ES | Longnose Sucker | 170 | 52 | 900226001222108 |
| PCR-OCES08 | 5-Aug-2021 | 208488 | ES | Mountain Whitefish | 65 | (blank) | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 41 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 46 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 55 | 2 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 56 | 2 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Longnose Sucker | 59 | 3 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 240 | 119 | 900228000463621 |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 257 | 161 | 900228000461786 |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 270 | 128 | 900228000678853 |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 285 | 152 | 900228000460227 |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Mountain Whitefish | 293 | 177 | 900228000461285 |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 29 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 30 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 39 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 55 | 1 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 56 | 1 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 56 | 2 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 70 | 3 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Redside Shiner | 76 | 6 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Slimy Sculpin | 34 | 0 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Slimy Sculpin | 82 | 5 | |
| PCR-OCES08 | 31-Oct-2021 | (blank) | ES | Troutperch | 51 | 1 | |
| PCR-OCES09 | 5-Aug-2021 | 208467 | ES | White Sucker | 366 | 702 | 900230000266534 |
| PCR-OCES10 | 5-Aug-2021 | 208430 | ES | Redside Shiner | 71 | 4 | |
| PCR-OCES10 | 5-Aug-2021 | 208431 | ES | Mountain Whitefish | 50 | 1 | |
| PCR-OCES10 | 5-Aug-2021 | 208432 | ES | Mountain Whitefish | 127 | 19 | 900226001222322 |
| PCR-OCES10 | 5-Aug-2021 | 208433 | ES | White Sucker | 413 | 793 | 900230000266576 |
| PCR-OCES10 | 5-Aug-2021 | 208434 | ES | Longnose Sucker | 211 | 121 | 900228000465076 |
| PCR-OCES10 | 5-Aug-2021 | 208435 | ES | White Sucker | 369 | 652 | 900230000266590 |
| PCR-OCES10 | 5-Aug-2021 | 208436 | ES | White Sucker | 387 | 714 | 900230000266535 |
| PCR-OCES10 | 5-Aug-2021 | 208437 | ES | Longnose Sucker | 422 | 777 | 900230000266510 |
| PCR-OCES10 | 5-Aug-2021 | 208438 | ES | Large Scale Sucker | 399 | 683 | 900230000266517 |
| PCR-OCES10 | 5-Aug-2021 | 208439 | ES | White Sucker | 387 | 711 | 900230000210685 |
| PCR-OCES10 | 5-Aug-2021 | 208440 | ES | Longnose Sucker | 267 | 223 | 900228000464711 |
| PCR-OCES10 | 5-Aug-2021 | 208441 | ES | Walleye | 380 | 587 | 900230000266507 |
| PCR-OCES10 | 5-Aug-2021 | 208442 | ES | Bull Trout | 363 | 476 | 900230000266505 |
| PCR-OCES11 | 4-Aug-2021 | 208713 | ES | Mountain Whitefish | 330 | 273 | 900230000266578 |
| PCR-OCES11 | 4-Aug-2021 | 208714 | ES | Mountain Whitefish | 262 | 170 | 900228000464750 |
| PCR-OCES11 | 4-Aug-2021 | 208715 | ES | Mountain Whitefish | 326 | 241 | 900230000266574 |
| PCR-OCES11 | 4-Aug-2021 | 208716 | ES | Mountain Whitefish | 261 | 166 | 900228000586840 |
| PCR-OCES11 | 4-Aug-2021 | 208717 | ES | Mountain Whitefish | 209 | 92 | 900230000266587 |
| PCR-OCES11 | 4-Aug-2021 | 208718 | ES | Mountain Whitefish | 280 | 180 | 900228000464207 |
| PCR-OCES11 | 4-Aug-2021 | 208719 | ES | Mountain Whitefish | 286 | 200 | 900228000464043 |
| PCR-OCES11 | 4-Aug-2021 | 208720 | ES | Mountain Whitefish | 300 | 220 | 900228000464719 |
| PCR-OCES11 | 4-Aug-2021 | 208722 | ES | Kokanee | 125 | 16 | |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (20 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCES11 | 4-Aug-2021 | 208723 | ES | Burbot | 140 | 16 | 900226001222161 |
| PCR-OCES12 | 5-Aug-2021 | 208410 | ES | Mountain Whitefish | 319 | 252 | 900230000266530 |
| PCR-OCES12 | 5-Aug-2021 | 208411 | ES | Mountain Whitefish | 273 | 162 | 900228000464927 |
| PCR-OCES12 | 5-Aug-2021 | 208412 | ES | Mountain Whitefish | 270 | 157 | 900228000465071 |
| PCR-OCES12 | 5-Aug-2021 | 208413 | ES | Mountain Whitefish | 284 | 193 | 900228000465598 |
| PCR-OCES12 | 5-Aug-2021 | 208414 | ES | Mountain Whitefish | 269 | 169 | 900228000465661 |
| PCR-OCES12 | 5-Aug-2021 | 208415 | ES | Mountain Whitefish | 332 | 296 | 900230000266512 |
| PCR-OCES12 | 5-Aug-2021 | 208416 | ES | Mountain Whitefish | 354 | 353 | 900230000266594 |
| PCR-OCES12 | 5-Aug-2021 | 208417 | ES | Mountain Whitefish | 269 | 165 | 900228000465330 |
| PCR-OCES12 | 5-Aug-2021 | 208418 | ES | Mountain Whitefish | 312 | 351 | 900230000266591 |
| PCR-OCES12 | 5-Aug-2021 | 208419 | ES | Mountain Whitefish | 315 | 232 | 900230000206126 |
| PCR-OCES12 | 5-Aug-2021 | 208420 | ES | Mountain Whitefish | 145 | 26 | 900226001222308 |
| PCR-OCES12 | 5-Aug-2021 | 208421 | ES | Large Scale Sucker | 480 | 1169 | 900230000266513 |
| PCR-OCES12 | 5-Aug-2021 | 208422 | ES | Mountain Whitefish | 58 | 1 | |
| PCR-OCES12 | 5-Aug-2021 | 208423 | ES | Redside Shiner | 100 | 12 | |
| PCR-OCES12 | 5-Aug-2021 | 208424 | ES | Longnose Sucker | 292 | 308 | 900228000465992 |
| PCR-OCES12 | 5-Aug-2021 | 208426 | ES | Walleye | 424 | 801 | 900230000266531 |
| PCR-OCES12 | 5-Aug-2021 | 208427 | ES | Slimy Sculpin | 65 | 3 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 94 | 8 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 95 | 8 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 98 | 9 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 102 | 11 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 105 | 8 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 106 | 9 | |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 253 | 156 | 900228000463390 |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 253 | 159 | 900228000465010 |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 266 | 436 | 900230000209417 |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 280 | 186 | 900228000680092 |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 293 | 203 | 900228000460086 |
| PCR-OCES12 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 455 | 792 | 900230000268479 |
| PCR-OCES13 | 4-Aug-2021 | 208574 | ES | Mountain Whitefish | 291 | 184 | 900228000438890 |
| PCR-OCES13 | 4-Aug-2021 | 208575 | ES | Mountain Whitefish | 303 | 203 | 900230000266617 |
| PCR-OCES13 | 4-Aug-2021 | 208576 | ES | Mountain Whitefish | 277 | 192 | 900228000464665 |
| PCR-OCES13 | 4-Aug-2021 | 208577 | ES | Mountain Whitefish | 268 | 172 | 900228000465152 |
| PCR-OCES13 | 4-Aug-2021 | 208578 | ES | Mountain Whitefish | 285 | 189 | 900228000464960 |
| PCR-OCES13 | 4-Aug-2021 | 208579 | ES | Mountain Whitefish | 275 | 166 | 900228000464713 |
| PCR-OCES13 | 4-Aug-2021 | 208580 | ES | Mountain Whitefish | 311 | 226 | 900230000266515 |
| PCR-OCES13 | 4-Aug-2021 | 208581 | ES | Mountain Whitefish | 286 | 179 | 900228000465040 |
| PCR-OCES13 | 4-Aug-2021 | 208582 | ES | Mountain Whitefish | 380 | 491 | 900230000266537 |
| PCR-OCES13 | 4-Aug-2021 | 208583 | ES | Mountain Whitefish | 309 | 229 | 900230000266618 |
| PCR-OCES13 | 4-Aug-2021 | 208584 | ES | Mountain Whitefish | 232 | 123 | 900228000464529 |
| PCR-OCES13 | 4-Aug-2021 | 208585 | ES | Mountain Whitefish | 286 | 184 | 900228000464792 |
| PCR-OCES13 | 4-Aug-2021 | 208586 | ES | Bull Trout | 397 | 563 | 900230000266575 |
| PCR-OCES13 | 4-Aug-2021 | 208587 | ES | Mountain Whitefish | 276 | 159 | 900228000465537 |
| PCR-OCES13 | 4-Aug-2021 | 208588 | ES | Mountain Whitefish | 260 | 157 | 900228000464891 |
| PCR-OCES13 | 4-Aug-2021 | 208589 | ES | Mountain Whitefish | 284 | 174 | 900228000465028 |
| PCR-OCES13 | 4-Aug-2021 | 208590 | ES | Mountain Whitefish | 312 | 266 | 900230000205803 |
| PCR-OCES13 | 4-Aug-2021 | 208591 | ES | Mountain Whitefish | 274 | 163 | 900228000465251 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (21 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-OCES13 | 4-Aug-2021 | 208592 | ES | Mountain Whitefish | 320 | 209 | 900230000074387 |
| PCR-OCES13 | 4-Aug-2021 | 208593 | ES | Mountain Whitefish | 308 | 231 | 900230000266532 |
| PCR-OCES13 | 4-Aug-2021 | 208647 | ES | Mountain Whitefish | 272 | 179 | 900228000464581 |
| PCR-OCES13 | 4-Aug-2021 | 208648 | ES | Mountain Whitefish | 262 | 171 | 900228000465952 |
| PCR-OCES13 | 4-Aug-2021 | 208649 | ES | Longnose Sucker | 387 | 699 | 900026000056569 |
| PCR-OCES13 | 4-Aug-2021 | 208650 | ES | Longnose Sucker | 210 | 105 | 900228000465234 |
| PCR-OCES13 | 4-Aug-2021 | 208651 | ES | Longnose Sucker | 259 | 206 | 900228000465904 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Bull Trout | 280 | 219 | 900228000460961 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 91 | 6 | |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 96 | 7 | |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 98 | 6 | |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 101 | 10 | |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 260 | 219 | 900228000461090 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 265 | 147 | 900228000461250 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 272 | 172 | 900228000680781 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 275 | 190 | 900228000464791 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 285 | 205 | 900228000461136 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Mountain Whitefish | 326 | 220 | 900230000211743 |
| PCR-OCES13 | 30-Oct-2021 | (blank) | ES | Rainbow Trout | 382 | 522 | 900230000268818 |
| PCR-SB07 | 4-Aug-2021 | 208675 | ES | Longnose Sucker | 315 | 390 | 900230000266573 |
| PCR-SB07 | 4-Aug-2021 | 208676 | ES | White Sucker | 366 | 533 | 900230000266588 |
| PCR-SB07 | 4-Aug-2021 | 208677 | ES | Walleye | 513 | 574 | 900230000266577 |
| PCR-SB07 | 4-Aug-2021 | 208678 | ES | Walleye | 452 | 1063 | 900230000202161 |
| PCR-SB07 | 4-Aug-2021 | 208679 | ES | Yellow Perch | 123 | 25 | |
| PCR-SB07 | 4-Aug-2021 | 208680 | ES | Walleye | 421 | 954 | 900230000266529 |
| PCR-SB07 | 4-Aug-2021 | 208681 | ES | Northern Pike | 718 | 2782 | 900230000266503 |
| PCR-SB07 | 4-Aug-2021 | 208682 | ES | Northern Pike | 584 | 1533 | 900230000266518 |
| PCR-SB07 | 4-Aug-2021 | 208721 | ES | White Sucker | 294 | 330 | 900228000464547 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Longnose Sucker | 30 | 1 | (blank) |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Longnose Sucker | 429 | 842 | 900010000056078 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Longnose Sucker | 447 | 1028 | 900230000258058 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Longnose Sucker | 480 | 1274 | 900230000258059 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 260 | 90 | 900228000463817 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 264 | 116 | 900228000463298 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 272 | 99 | 900228000463659 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 275 | 156 | (blank) |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 281 | 187 | (blank) |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Mountain Whitefish | 315 | 272 | 900230000258007 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Northern Pike | 547 | 1145 | 900230000258140 |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | Northern Pikeminnow | 38 | 1 | (blank) |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | White Sucker | 70 | 2 | (blank) |
| PCR-SB07 | 26-Sep-2021 | (blank) | ES | White Sucker | 453 | 1062 | 900230000258031 |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (22 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-BS02 | 26-Sep-2021 | | BS | Cyprinid spp. | 18 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Cyprinid spp. | | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Longnose Dace | 21 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Northern Pikeminnow | 35 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 16 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 17 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 19 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 20 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 21 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 22 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 23 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | 24 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Redside Shiner | | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Spottail Shiner | 21 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 18 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 20 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 21 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 22 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 24 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 25 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 26 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 30 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | 35 | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Sucker spp. | | | |
| PCR-BS02 | 26-Sep-2021 | | BS | Unknown | | | |
| PCR-BS02 | 26-Sep-2021 | | BS | White Sucker | 46 | 0.025 | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 15 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 16 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 17 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 18 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 19 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 20 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 21 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 24 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | 25 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Longnose Dace | | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Redside Shiner | 15 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Redside Shiner | 20 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Redside Shiner | 21 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Redside Shiner | 26 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Redside Shiner | | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Slimy Sculpin | 14 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 15 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 16 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 18 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 19 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 20 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 21 | | |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

**Table 10. Continued (23 of 23).**

| Site Name | Date | Fish ID | Method | Species | Length (mm) | Weight (g) | Tag Number |
|---|---|---|---|---|---|---|---|
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 22 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | 26 | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Sucker spp. | | | |
| PCR-BS03 | 26-Sep-2021 | | BS | Unknown | | | |
| PCR-BS03 | 26-Oct-2021 | 213250 | BS | Longnose Sucker | 60 | 2 | |
| PCR-BS03 | 26-Oct-2021 | 213251 | BS | Longnose Dace | 22 | | |
| PCR-BS03 | 26-Oct-2021 | 213252 | BS | Longnose Sucker | 43 | | |
| PCR-BS03 | 26-Oct-2021 | 213253 | BS | Slimy Sculpin | 39 | | |
| PCR-BS050 | 26-Sep-2021 | | BS | Redside Shiner | 23 | | |
| PCR-BS503 | 26-Sep-2021 | | BS | Redside Shiner | 18 | | |
| PCR-GN05( | 26-Sep-2021 | | GN | Large Scale Sucker | 395 | | |
| PCR-GN05( | 26-Sep-2021 | | GN | Large Scale Sucker | 461 | | 900230000258029 |
| PCR-GN05( | 26-Sep-2021 | | GN | Large Scale Sucker | 466 | | 900230000258027 |
| PCR-GN05( | 26-Sep-2021 | | GN | Large Scale Sucker | 515 | | 900230000205623 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 395 | | 900230000258181 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 405 | | 900230000263936 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 406 | | 900010000188233 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 410 | | 900230000205101 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 410 | | 900230000263339 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 411 | | 900230000258005 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 414 | | 900230000258192 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 418 | | 900230000258174 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 420 | | 900230000258093 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 424 | | 900230000126967 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 425 | | 900230000258006 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 435 | | 900230000258072 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 436 | | 900230000258081 |
| PCR-GN05( | 26-Sep-2021 | | GN | Longnose Sucker | 440 | | 900230000081739 |
| PCR-GN05( | 26-Sep-2021 | | GN | Northern Pike | 466 | | 900230000258101 |
| PCR-GN05( | 26-Sep-2021 | | GN | Northern Pike | 560 | | 900230000258079 |
| PCR-GN05( | 26-Sep-2021 | | GN | Northern Pike | 634 | | 900230000258100 |
| PCR-GN05( | 26-Sep-2021 | | GN | Northern Pike | 788 | | 900230000258047 |
| PCR-GN05( | 26-Sep-2021 | | GN | White Sucker | 385 | | 900230000262686 |
| PCR-GN05( | 26-Oct-2021 | 213245 | GN | Longnose Sucker | 423 | 773 | 900230000268268 |
| PCR-GN05( | 26-Oct-2021 | 213246 | GN | Mountain Whitefish | 269 | 159 | |
| PCR-GN05( | 26-Oct-2021 | 213247 | GN | Longnose Sucker | 400 | | |
| PCR-GN05( | 26-Oct-2021 | 213248 | GN | Longnose Sucker | 400 | | |
| PCR-OCGN | 26-Oct-2021 | 213255 | GN | Mountain Whitefish | 274 | 148 | |
| PCR-OCGN | 26-Oct-2021 | 213256 | GN | White Sucker | 230 | 130 | |
| PCR-OCMT | 25-Oct-2021 | 213265 | MT | Longnose Sucker | 49 | | |
| PCR-OCMT | 4-Aug-2021 | 208770 | MT | Longnose Sucker | 75 | 3 | |
| PCR-OCMT | 25-Oct-2021 | 213264 | MT | Longnose Sucker | 54 | 1 | |
| PCR-OCMT | 25-Oct-2021 | 213267 | MT | Large Scale Sucker | 52 | | |

Note: Fish methods: BE=Large-Fish Boat Electroshocking, ES=Small-Fish Boat Electroshocking, EF=Backpack Electrofishing, GN=Gillnet, MT=Minnow Trap, HT=Hoop Trap, BS=Beach Seine.

# Appendix E. Transect Profiles

## LIST OF FIGURES

## LIST OF TABLES

**Figure 1.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMB02.

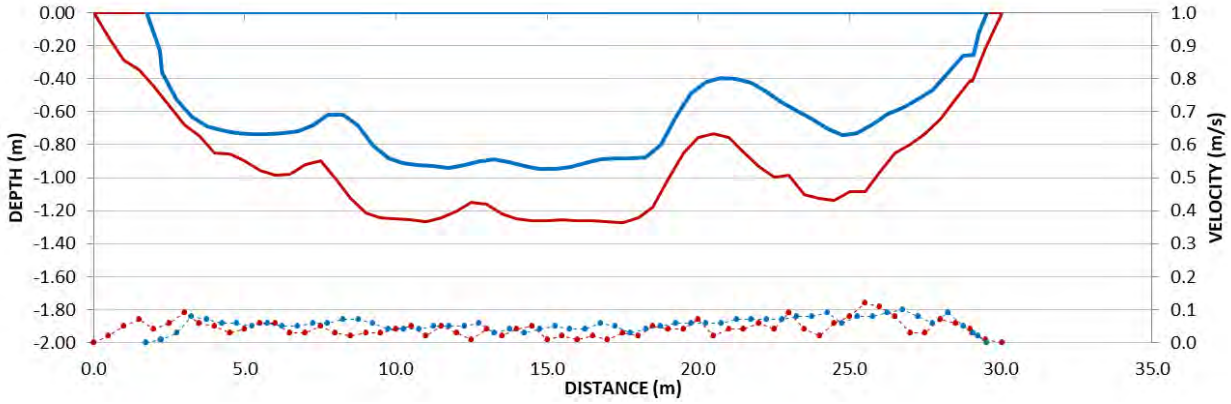


**Figure 2.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMB03.

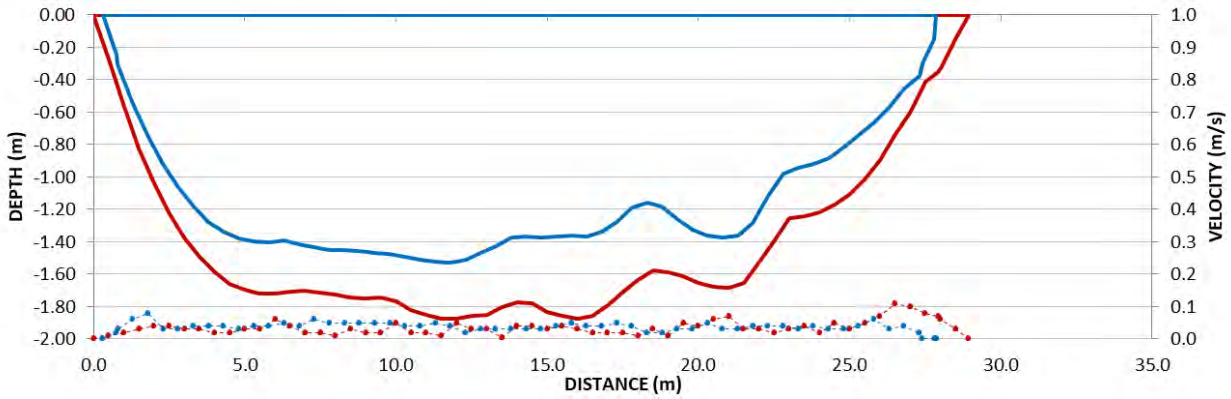


**Figure 3.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMB05.

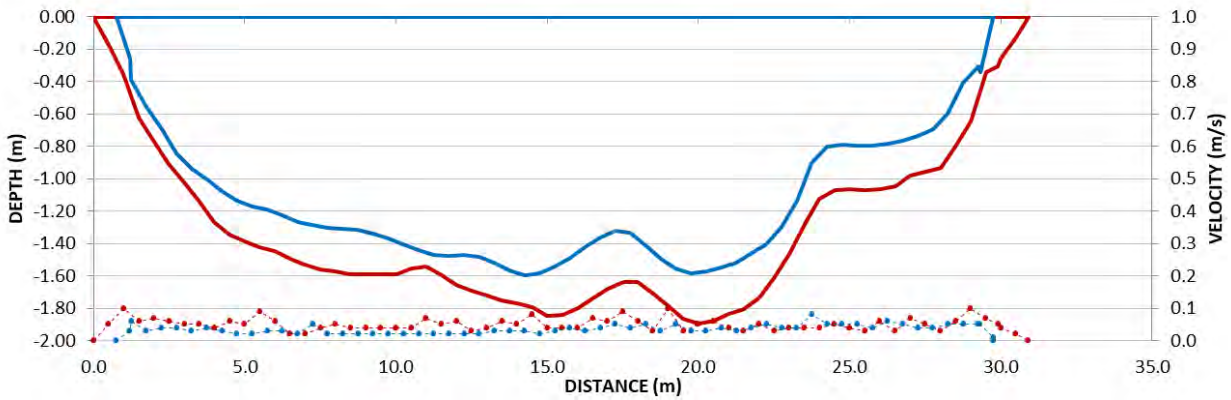

**Figure 4.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GME01.

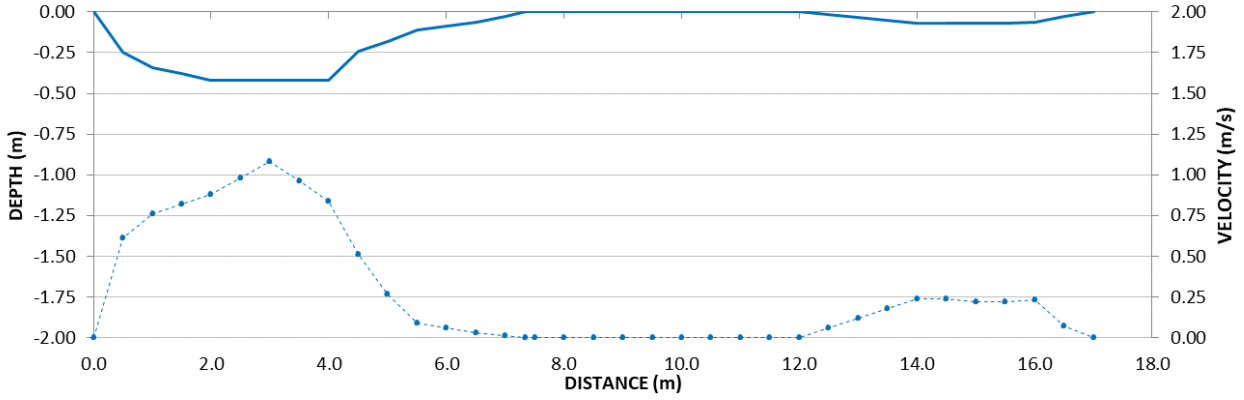


**Figure 5.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GME02.

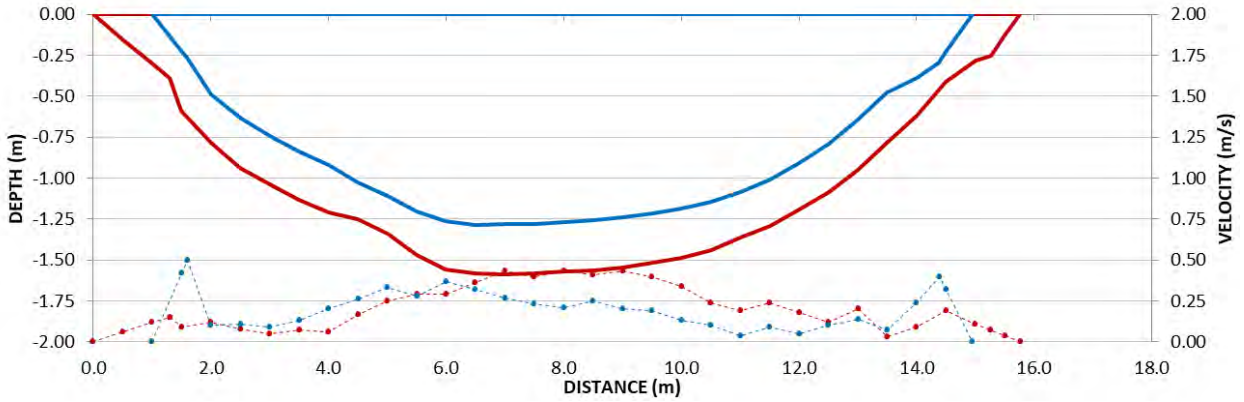


**Figure 6.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GME03.

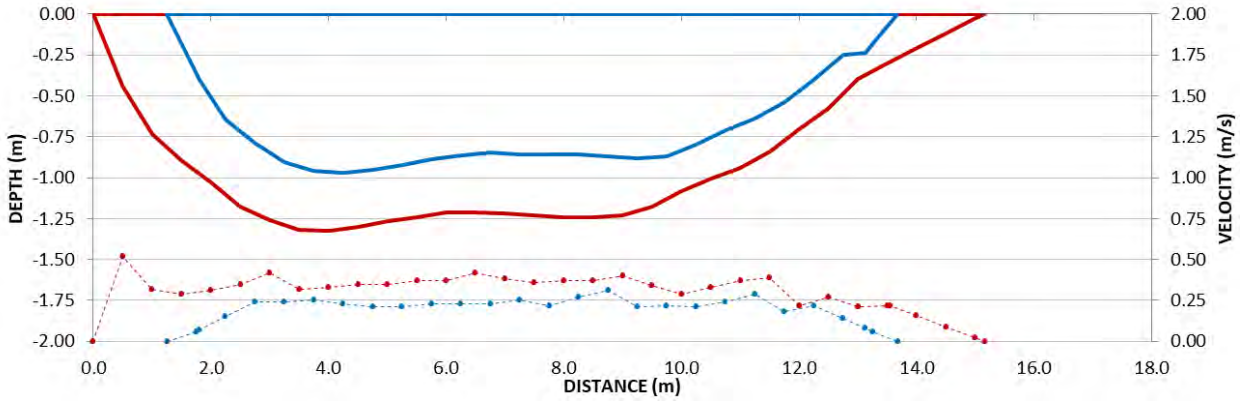

**Figure 7.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMP02.

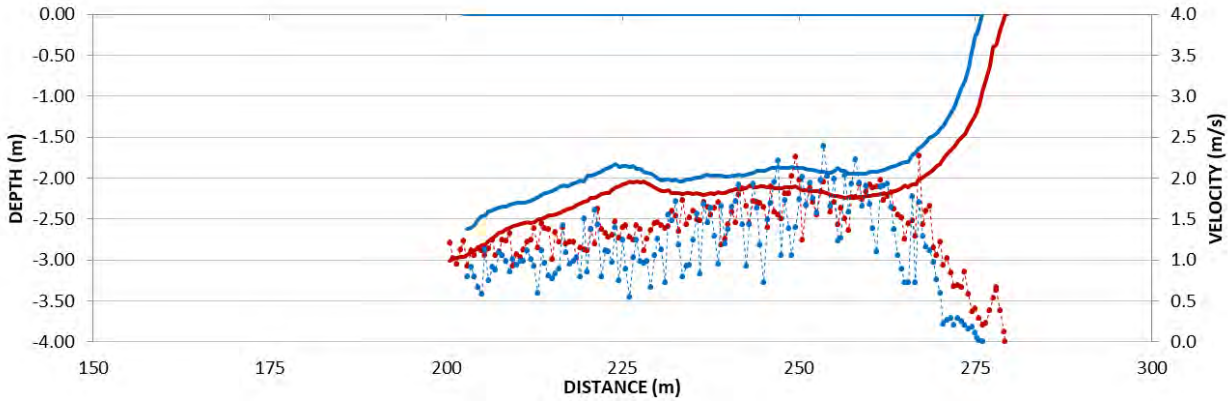


**Figure 8.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMP04.

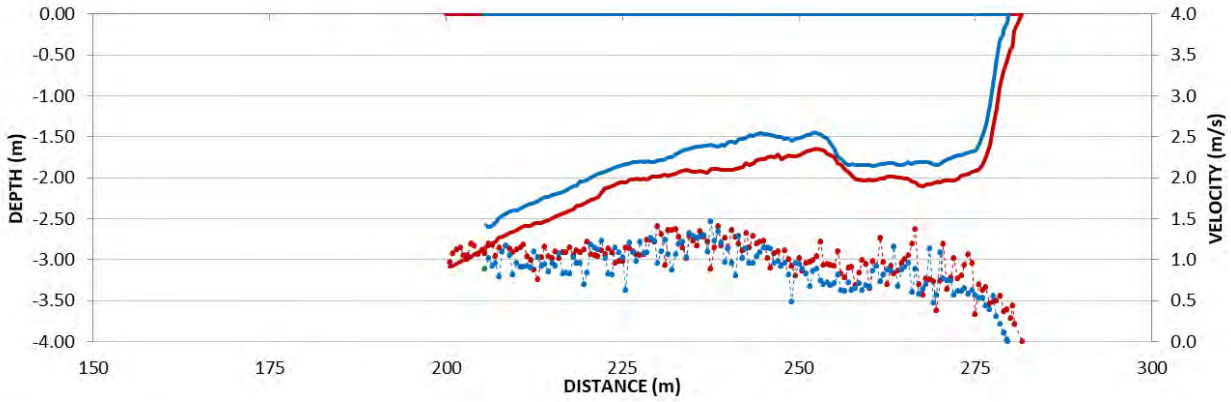


**Figure 9.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMS02.

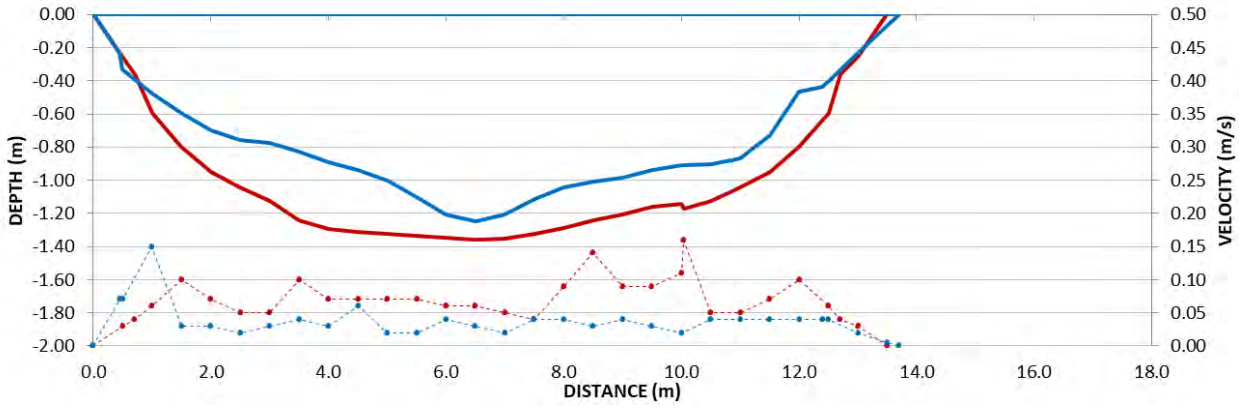

**Figure 10.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMS03.

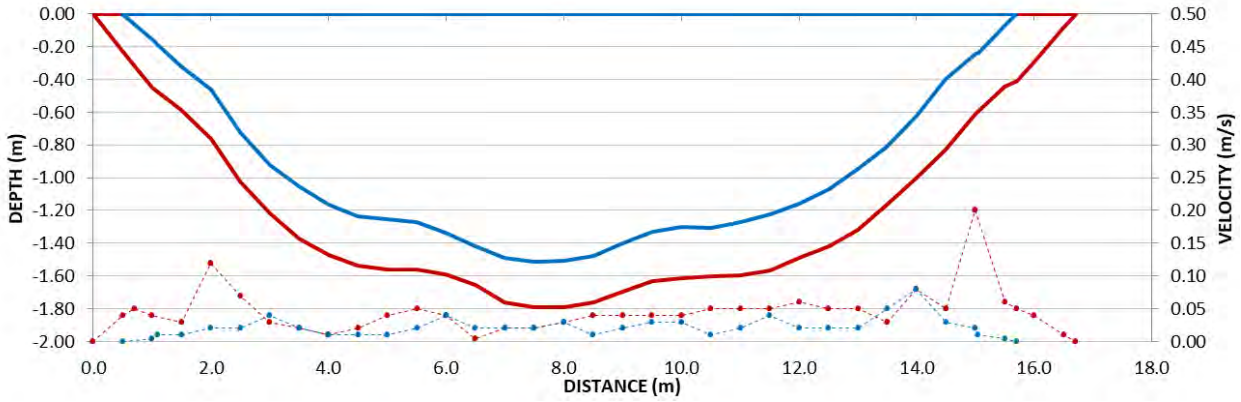


**Figure 11.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMS04.

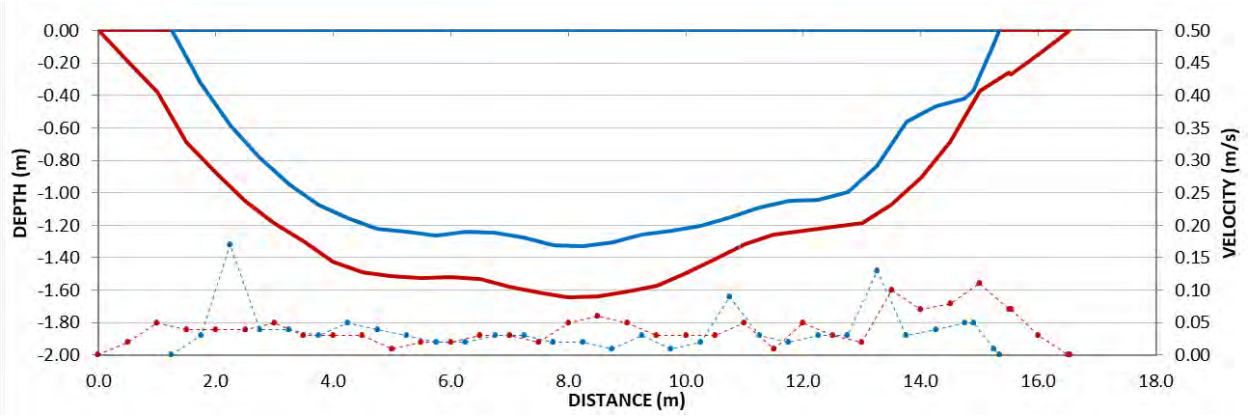


**Figure 12.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMW01.

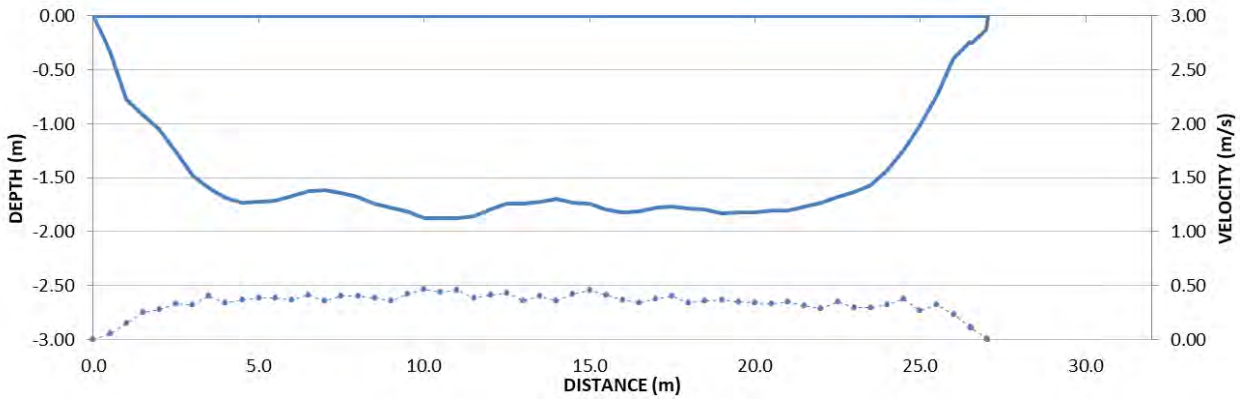

**Figure 13.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMW02.

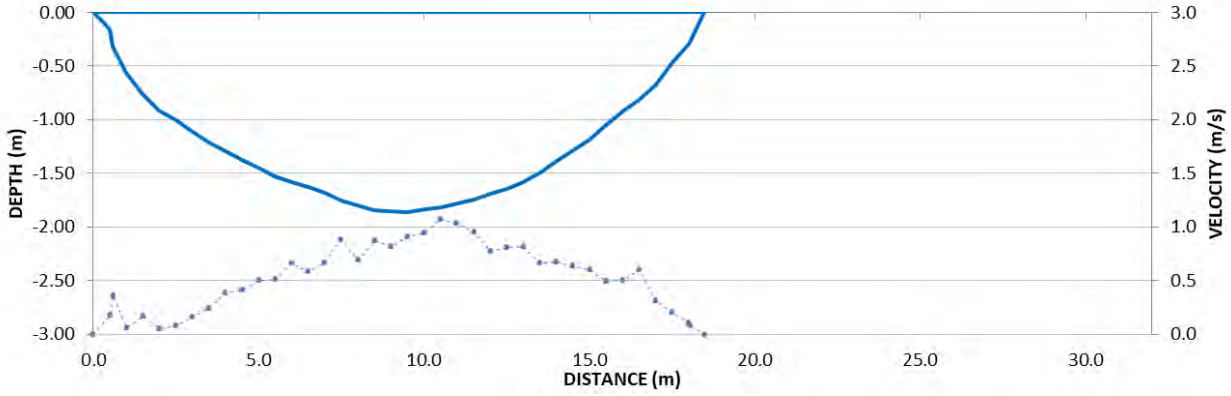


**Figure 14.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMW05.

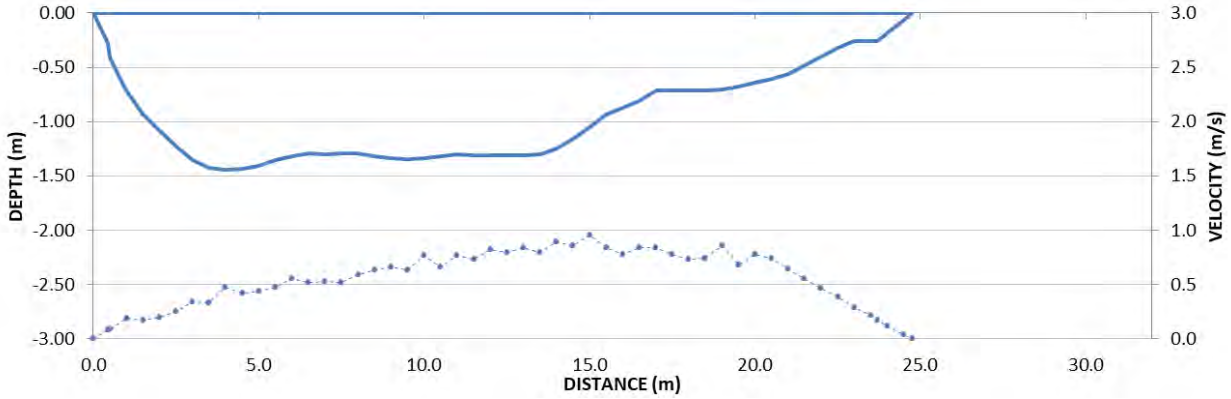


**Figure 15.** Water depth (solid lines) and velocity profiles (dashed lines) from August (blue) and October (red) measurement for transect profile GMW08.

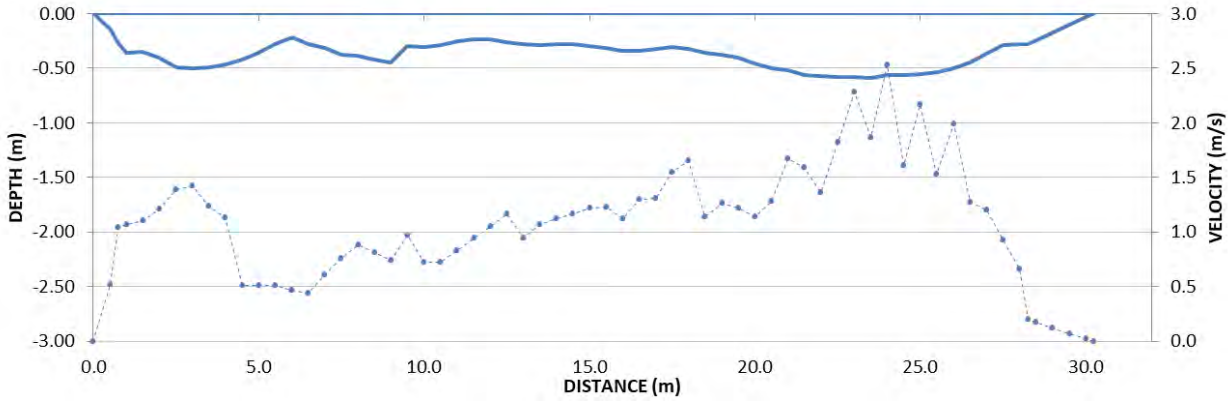

**Table 1. Weighted usable width (WUW) for transects at Peace River (including discharge at Peace River Above Pine (WSC 07FA004)) Site 108R channel for a) Bull Trout, b) Mountain Whitefish, and c) Rainbow Trout.**

a)

| Channel | Date | Transect | Discharge ($m^3/s$) | Juvenile WUW (m) | Adult Rearing |
|---|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 743.0 | 27.4 | 27.4 |
| | | GMB03 | 743.0 | 18.8 | 18.8 |
| | | GMB05 | 743.0 | 17.8 | 17.8 |
| | **Aug-21 Average** | | **743.0** | **21.3** | **21.3** |
| | 2-Oct-21 | GMB02 | 950.0 | 29.0 | 29.0 |
| | | GMB03 | 943.0 | 8.8 | 8.8 |
| | | GMB05 | 934.0 | 11.5 | 11.5 |
| | **Oct-21 Average** | | **942.3** | **16.4** | **16.4** |
| East Side Channel | 6-Aug-21 | GME01 | 743.0 | 0.1 | 0.1 |
| | | GME02 | 743.0 | 12.4 | 13.1 |
| | | GME03 | 743.0 | 11.3 | 11.9 |
| | **Aug-21 Average** | | **743.0** | **11.9** | **12.5** |
| | 1-Oct-21 | GME01[1] | - | - | - |
| | | GME02 | 1,100.0 | 9.1 | 9.1 |
| | | GME03 | 903.0 | 9.5 | 10.9 |
| | **Oct-21 Average** | | **1,001.5** | **9.3** | **10.0** |
| Main Channel Bar | 6-Aug-21 | GMP02 | 743.0 | 4.8 | 5.1 |
| | | GMP04 | 743.0 | 1.8 | 1.9 |
| | **Aug-21 Average** | | **743.0** | **3.3** | **3.5** |
| | 1-Oct-21 | GMP02 | 865.0 | 2.6 | 2.9 |
| | | GMP04 | 900.0 | 2.1 | 2.4 |
| | **Oct-21 Average** | | **882.5** | **2.4** | **2.7** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 743.0 | 13.3 | 13.3 |
| | | GMS03 | 743.0 | 11.0 | 11.0 |
| | | GMS04 | 743.0 | 13.8 | 13.8 |
| | **Aug-21 Average** | | **743.0** | **12.7** | **12.7** |
| | 2-Oct-21 | GMS02 | 883.0 | 13.0 | 13.0 |
| | | GMS03 | 893.0 | 7.3 | 7.3 |
| | | GMS04 | 916.0 | 8.0 | 8.0 |
| | **Oct-21 Average** | | **897.3** | **9.4** | **9.4** |
| West Side Channel | 6-Aug-21 | GMW01 | 743.0 | 4.6 | 5.0 |
| | | GMW02 | 743.0 | 5.5 | 5.8 |
| | | GMW05 | 743.0 | 5.2 | 5.6 |
| | 5-Aug-21 | GMW08 | 743.0 | 1.4 | 1.5 |
| | **Aug-21 Average** | | **743.0** | **4.2** | **4.5** |
| | Oct-21 | GMW01[2] | - | - | - |
| | | GMW02[2] | - | - | - |
| | | GMW05[2] | - | - | - |
| | | GMW08[2] | - | - | - |
| | **Oct-21 Average** | | - | - | - |

[1]Transect too shallow to measure

[2]No survey of West Side Channel in October 2021

**Table 1. Continued.**

b) Bull Trout

| Channel | Date | Transect | Discharge ($m^3/s$) | Rearing WUW (m) |
|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 743.0 | 5.4 |
| | | GMB03 | 743.0 | 2.6 |
| | | GMB05 | 743.0 | 2.7 |
| | **Aug-21 Average** | | **743.0** | **3.6** |
| | 2-Oct-21 | GMB02 | 950.0 | 4.1 |
| | | GMB03 | 943.0 | 2.6 |
| | | GMB05 | 934.0 | 3.0 |
| | **Oct-21 Average** | | **942.3** | **3.2** |
| East Side Channel | 6-Aug-21 | GME01 | 743.0 | 0.3 |
| | | GME02 | 743.0 | 1.1 |
| | | GME03 | 743.0 | 2.5 |
| | **Aug-21 Average** | | **743.0** | **1.8** |
| | 1-Oct-21 | GME01[1] | - | - |
| | | GME02 | 1,100.0 | 2.5 |
| | | GME03 | 903.0 | 1.3 |
| | **Oct-21 Average** | | **1,001.5** | **1.9** |
| Main Channel Bar | 6-Aug-21 | GMP02 | 743.0 | 1.0 |
| | | GMP04 | 743.0 | 0.8 |
| | **Aug-21 Average** | | **743.0** | **0.9** |
| | 1-Oct-21 | GMP02 | 865.0 | 0.1 |
| | | GMP04 | 900.0 | 1.0 |
| | **Oct-21 Average** | | **882.5** | **0.6** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 743.0 | 2.6 |
| | | GMS03 | 743.0 | 2.6 |
| | | GMS04 | 743.0 | 2.0 |
| | **Aug-21 Average** | | **743.0** | **2.4** |
| | 2-Oct-21 | GMS02 | 883.0 | 2.0 |
| | | GMS03 | 893.0 | 2.3 |
| | | GMS04 | 916.0 | 2.8 |
| | **Oct-21 Average** | | **897.3** | **2.3** |
| West Side Channel | 6-Aug-21 | GMW01 | 743.0 | 1.7 |
| | | GMW02 | 743.0 | 1.3 |
| | | GMW05 | 743.0 | 1.9 |
| | 5-Aug-21 | GMW08 | 743.0 | 1.0 |
| | **Aug-21 Average** | | **743.0** | **1.5** |
| | Oct-21 | GMW01[2] | - | - |
| | | GMW02[2] | - | - |
| | | GMW05[2] | - | - |
| | | GMW08[2] | - | - |
| | **Oct-21 Average** | | - | - |

[1]Transect too shallow to measure

[2]No survey of West Side Channel in October 2021

**Table 1. Continued.**

c) Mountain Whitefish

| Channel | Date | Transect | Discharge ($m^3/s$) | Juvenile WUW (m) | Adult Rearing WUW (m) |
|---|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 743.0 | 14.8 | 13.6 |
| | | GMB03 | 743.0 | 8.7 | 18.6 |
| | | GMB05 | 743.0 | 9.8 | 19.7 |
| | **Aug-21 Average** | | **743.0** | **11.1** | **17.3** |
| | 2-Oct-21 | GMB02 | 950.0 | 11.3 | 19.1 |
| | | GMB03 | 943.0 | 8.2 | 19.5 |
| | | GMB05 | 934.0 | 8.8 | 20.7 |
| | **Oct-21 Average** | | **942.3** | **9.4** | **19.8** |
| East Side Channel | 6-Aug-21 | GME01 | 743.0 | 0.8 | 0.3 |
| | | GME02 | 743.0 | 6.4 | 8.4 |
| | | GME03 | 743.0 | 7.7 | 7.1 |
| | **Aug-21 Average** | | **743.0** | **7.1** | **7.8** |
| | 1-Oct-21 | GME01[1] | - | - | - |
| | | GME02 | 1,100.0 | 6.0 | 10.4 |
| | | GME03 | 903.0 | 7.5 | 10.6 |
| | **Oct-21 Average** | | **1,001.5** | **6.8** | **10.5** |
| Main Channel Bar | 6-Aug-21 | GMP02 | 743.0 | 4.2 | 21.1 |
| | | GMP04 | 743.0 | 5.8 | 38.8 |
| | **Aug-21 Average** | | **743.0** | **5.0** | **29.9** |
| | 1-Oct-21 | GMP02 | 865.0 | 2.8 | 7.5 |
| | | GMP04 | 900.0 | 4.9 | 24.0 |
| | **Oct-21 Average** | | **882.5** | **3.9** | **15.8** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 743.0 | 5.8 | 7.7 |
| | | GMS03 | 743.0 | 4.7 | 8.9 |
| | | GMS04 | 743.0 | 4.9 | 8.6 |
| | **Aug-21 Average** | | **743.0** | **5.2** | **8.4** |
| | 2-Oct-21 | GMS02 | 883.0 | 4.5 | 8.4 |
| | | GMS03 | 893.0 | 5.3 | 10.2 |
| | | GMS04 | 916.0 | 4.9 | 10.0 |
| | **Oct-21 Average** | | **897.3** | **4.9** | **9.5** |
| West Side Channel | 6-Aug-21 | GMW01 | 743.0 | 11.3 | 23.1 |
| | | GMW02 | 743.0 | 4.8 | 13.2 |
| | | GMW05 | 743.0 | 6.9 | 17.4 |
| | 5-Aug-21 | GMW08 | 743.0 | 3.1 | 0.8 |
| | **Aug-21 Average** | | **743.0** | **6.5** | **13.6** |
| | Oct-21 | GMW01[2] | - | - | - |
| | | GMW02[2] | - | - | - |
| | | GMW05[2] | - | - | - |
| | | GMW08[2] | - | - | - |
| | **Oct-21 Average** | | - | - | - |

[1]Transect too shallow to measure

[2]No survey of West Side Channel in October 2021

**Table 1. Continued.**

d) Rainbow Trout

| Channel | Date | Transect | Discharge ($m^3/s$) | Adult and Juvenile WUW (m) |
|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 743.0 | 9.1 |
| | | GMB03 | 743.0 | 6.4 |
| | | GMB05 | 743.0 | 6.1 |
| | **Aug-21 Average** | | **743.0** | **7.2** |
| | 2-Oct-21 | GMB02 | 950.0 | 7.4 |
| | | GMB03 | 943.0 | 5.8 |
| | | GMB05 | 934.0 | 9.1 |
| | **Oct-21 Average** | | **942.3** | **7.4** |
| East Side Channel | 6-Aug-21 | GME01 | 743.0 | 3.4 |
| | | GME02 | 743.0 | 10.6 |
| | | GME03 | 743.0 | 10.7 |
| | **Aug-21 Average** | | **743.0** | **10.7** |
| | 1-Oct-21 | GME01[1] | - | - |
| | | GME02 | 1,100.0 | 11.4 |
| | | GME03 | 903.0 | 14.0 |
| | **Oct-21 Average** | | **1,001.5** | **12.7** |
| Main Channel Bar | 6-Aug-21 | GMP02 | 743.0 | 19.7 |
| | | GMP04 | 743.0 | 33.6 |
| | **Aug-21 Average** | | **743.0** | **26.7** |
| | 1-Oct-21 | GMP02 | 865.0 | 10.1 |
| | | GMP04 | 900.0 | 25.6 |
| | **Oct-21 Average** | | **882.5** | **17.9** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 743.0 | 3.0 |
| | | GMS03 | 743.0 | 2.0 |
| | | GMS04 | 743.0 | 3.1 |
| | **Aug-21 Average** | | **743.0** | **2.7** |
| | 2-Oct-21 | GMS02 | 883.0 | 5.2 |
| | | GMS03 | 893.0 | 4.4 |
| | | GMS04 | 916.0 | 3.8 |
| | **Oct-21 Average** | | **897.3** | **4.5** |
| West Side Channel | 6-Aug-21 | GMW01 | 743.0 | 25.9 |
| | | GMW02 | 743.0 | 12.9 |
| | | GMW05 | 743.0 | 18.6 |
| | 5-Aug-21 | GMW08 | 743.0 | 8.0 |
| | **Aug-21 Average** | | **743.0** | **16.3** |
| | Oct-21 | GMW01[2] | - | - |
| | | GMW02[2] | - | - |
| | | GMW05[2] | - | - |
| | | GMW08[2] | - | - |
| | **Oct-21 Average** | | - | - |

[1]Transect too shallow to measure

[2]No survey of West Side Channel in October 2021

**Table 1. Continued.**

e) Walleye

| Channel | Date | Transect | Discharge ($m^3/s$) | Rearing WUW (m) |
|---|---|---|---|---|
| Backwater Channel | 4-Aug-21 | GMB02 | 743.0 | 15.7 |
| | | GMB03 | 743.0 | 21.4 |
| | | GMB05 | 743.0 | 21.7 |
| | **Aug-21 Average** | | **743.0** | **19.6** |
| | 2-Oct-21 | GMB02 | 950.0 | 19.6 |
| | | GMB03 | 943.0 | 23.0 |
| | | GMB05 | 934.0 | 25.3 |
| | **Oct-21 Average** | | **942.3** | **22.6** |
| East Side Channel | 6-Aug-21 | GME01 | 743.0 | 0.5 |
| | | GME02 | 743.0 | 9.1 |
| | | GME03 | 743.0 | 7.3 |
| | **Aug-21 Average** | | **743.0** | **8.2** |
| | 1-Oct-21 | GME01[1] | - | - |
| | | GME02 | 1,100.0 | 10.3 |
| | | GME03 | 903.0 | 7.9 |
| | **Oct-21 Average** | | **1,001.5** | **9.1** |
| Main Channel Bar | 6-Aug-21 | GMP02 | 743.0 | 4.1 |
| | | GMP04 | 743.0 | 4.2 |
| | **Aug-21 Average** | | **743.0** | **4.1** |
| | 1-Oct-21 | GMP02 | 865.0 | 2.2 |
| | | GMP04 | 900.0 | 2.9 |
| | **Oct-21 Average** | | **882.5** | **2.6** |
| South Side Channel Spur Extension | 5-Aug-21 | GMS02 | 743.0 | 7.8 |
| | | GMS03 | 743.0 | 9.5 |
| | | GMS04 | 743.0 | 9.3 |
| | **Aug-21 Average** | | **743.0** | **8.9** |
| | 2-Oct-21 | GMS02 | 883.0 | 9.8 |
| | | GMS03 | 893.0 | 12.6 |
| | | GMS04 | 916.0 | 11.8 |
| | **Oct-21 Average** | | **897.3** | **11.4** |
| West Side Channel | 6-Aug-21 | GMW01 | 743.0 | 18.0 |
| | | GMW02 | 743.0 | 4.9 |
| | | GMW05 | 743.0 | 5.3 |
| | 5-Aug-21 | GMW08 | 743.0 | 0.7 |
| | **Aug-21 Average** | | **743.0** | **7.2** |
| | Oct-21 | GMW01[2] | - | - |
| | | GMW02[2] | - | - |
| | | GMW05[2] | - | - |
| | | GMW08[2] | - | - |
| | **Oct-21 Average** | | - | - |

[1]Transect too shallow to measure

[2]No survey of West Side Channel in October 2021