

## **Peace Project Water Use Plan Peace River Management Plan**

### **Monitoring Programs and Physical Works Annual Report 2018**

**Implementation Period: June 2017 to July 2018**

- **GMSMON-1 PCR Creel Survey**
- **GMSMON-2 PCR Fish Index**
- **GMSMON-5 PCR Productivity**
- **GMSMON-7 PCR Side Channel Fisheries**
- **GMSWORKS-1 PCR Aerial Photos**
- **GMSWORKS-3 PCR Side Channels**
- **GMSWORKS-4 PCR Hydraulic Habitat**
- **GMSWORKS-5 PCR Hydraulic Model**
- **GMSWORKS-6 PCR Mainstem Stage Discharge**
- **GMSWORKS-7 PCR Riparian Habitat Assessment**
- **GMSWORKS-10 PCR Industry & Taylor Water Quality Assessment**
- **GMSWORKS-13 PCR Recreation Access**
- **GMSWORKS-29 Lynx Creek Boat Launch Maintenance**
- **GMSWORKS-30 Taylor Boat Launch Design**
- **GMSWORKS-38 Taylor Boat Launch Construction**
- **GMSWORKS-40 Blackfoot Park Boat Launch Design**
- **GMSWORKS-41 Halfway River Boat Launch Design**
- **GMSWORKS-48 Blackfoot Park Boat Launch Construction**
- **GMSWORKS-52 Halfway River Boat Launch Maintenance**
- **GMSWORKS-55 Blackfoot Park Boat Launch Maintenance**
- **GMSWORKS-63 Taylor Boat Launch Maintenance**

**For Water Licences 123018, 123019, 123020, 123021, 123025**

**August 31, 2018**

## **BC Hydro Peace Project Water Use Plan Peace River Management Plan Annual Report: 2018**

### **1 Introduction**

This document represents a summary of the status and the results of the Peace Project Peace River Management Plan Water Use Plan (WUP) monitoring program and physical works projects to July 31, 2018, as per the Peace Order under the *Water Act*, dated August 9, 2007. This annual report includes those projects in Schedule C of the Order. There are four monitoring programs and seventeen physical works.

### **2 Status**

The following table outlines the dates that Terms of Reference (TOR) for the Peace River Management Plan WUP monitoring programs and physical works were submitted to and approved by the Comptroller of Water Rights (CWR).

**Table 2-1 Dates of Peace River Management Plan WUP TOR Submissions and Approvals by the Comptroller of Water Rights**

| Monitoring Program & Physical Works TOR                    | Order Clause   | Original ToR Submission |                          | Most Recent ToR Resubmission |  |
|--|----------------|-------------------------|--------------------------|------------------------------|--|
|  |                | Date Submitted          | Date Approved            | Date Submitted               | Date Approved                              |
| GMSMON-1 PCR Creel Survey                                  | Schedule C.4.a | Apr 10, 2008            | Apr 28, 2008             | Aug 26, 2011                 | Nov 23, 2011 Approval to cancel            |
| GMSMON-2 PCR Fish Index                                    | Schedule C.4.b | Apr 10, 2008            | Apr 28, 2008             | Jul 24, 2015                 | Sep 8, 2015 approval to suspend            |
| GMSMON-5 PCR Productivity                                  | Schedule C.4.c | Aug 08, 2008            | Sep 15, 2008             | Jul 24, 2015                 | Sep 8, 2015 approval to suspend            |
| GMSMON-7 PCR Side Channel Fisheries                        | Schedule C.4.d | Feb 07, 2008            | Apr 02, 2008             | Jul 24, 2015                 | Sep 8, 2015 approval to suspend            |
| GMSWORKS-1 PCR Aerial Photos                               | Schedule C.1   | May 09, 2008            | Jun 02, 2008             | Jul 24, 2015                 | Sep 8, 2015 approval to suspend            |
| GMSWORKS-3 PCR Side Channels                               | Schedule C.1.a | May 09, 2008            | Jun 02, 2008             | Jul 24, 2015                 | Sep 8, 2015 approval to suspend            |
| GMSWORKS-4 PCR Hydraulic Habitat                           | Schedule C.1.b | May 09, 2008            | Jun 02, 2008             | Aug 07, 2009                 | Jan 20, 2010                               |
| GMSWORKS-5 PCR Hydraulic Model                             | Schedule C.1.b | May 09, 2008            | Jun 02, 2008             | Aug 07, 2009                 | Jan 20, 2010                               |
| GMSWORKS-6 PCR Mainstem Stage Discharge                    | Schedule C.1.b | May 09, 2008            | Jun 02, 2008             | Jun 27, 2013                 | Jul 11, 2013                               |
| GMSWORKS-7 PCR Riparian Habitat Assessment                 | Schedule C.1.c | Feb 07, 2008            | Apr 02, 2008             | Aug 07, 2009                 | Jan 20, 2010                               |
| GMSWORKS-10 PCR Industry & Taylor Water Quality Assessment | Schedule C.4.e | Nov 26, 2008            | Dec 17, 2008             |                              |  |
| GMSWORKS-13 PCR Recreation Access                          | Schedule C.2   | May 09, 2008            | Jun 02, 2008             | Aug 07, 2009                 | Jan 20, 2010                               |
| GMSWORKS-29 Lynx Creek Boat Launch Maintenance             | Schedule C.2.a | Apr 16, 2010            | May 07, 2010             |                              |  |
| GMSWORKS-30 Taylor Boat Launch Design                      | Schedule C.2.c | Apr 16, 2010            | May 07, 2010             | Jul 25, 2012                 | Aug 02, 2012                               |
| GMSWORKS-38 Taylor Boat Launch Construction                | Schedule C.2.c | Jul 25, 2012            | Aug 02, 2012             | Oct 30, 2013                 | Nov 05, 2013                               |
| GMSWORKS-40 Blackfoot Park Boat Launch Design              | Schedule C.2.d | Apr 15, 2010            | Jun 28, 2010             | Aug 19, 2013                 | Oct 10, 2013 Approval to cancel            |
| GMSWORKS-41 Halfway River Boat Launch Design               | Schedule C.2.b | Apr 15, 2010            | Jun 28, 2010             | Apr 18, 2011                 | Apr 3, 2012 Deferred until Site C decision |
| GMSWORKS-48 Blackfoot Park Boat Launch Construction        | Schedule C.2.d | Apr 18, 2011            | Apr 3, 2012 Deferred     | Aug 19, 2013                 | Oct 10, 2013 Approval to cancel            |
| GMSWORKS-52 Halfway River Boat Launch Maintenance          | Schedule C.2.b | Apr 18, 2011            | Apr 03, 2012             |                              |  |
| GMSWORKS-55 Blackfoot Park Boat Launch Maintenance         | Schedule C.2.d | Apr 18, 2011            | Apr 3, 2012 Deferred     | Aug 19, 2013                 | Cancelled Oct 10, 2013                     |
| GMSWORKS-63 Taylor Boat Launch Maintenance                 | Schedule C.2.c | Jul 25, 2012            | Aug 1, 2012 Not approved | Mar 30, 2018                 | May 24, 2018                               |

3 Schedule

The following table outlines the current schedule for the monitoring programs and physical works being delivered for the Peace River Management Plan WUP.

Table 3-1: Monitoring Programs and Physical Works Schedule as of July 31, 2018

| Monitoring Programs and Physical Works                      | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|   | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  | WLR  |
|   | YR1  | YR2  | YR3  | YR4  | YR5  | YR6  | YR7  | YR8  | YR9  | YR10 | YR11 | YR12 | YR13 | YR14 | YR15 | YR16 | YR17 | YR18 | YR19 | YR20 |
| GMSMON-1: PCR Creel Survey                                  |      | x    | x    | •    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSMON-2: PCR Fish Index <sup>1</sup>                       | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSMON-5: PCR Productivity <sup>1</sup>                     |      |      | Del  | Del  | Del  | ✓    | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSMON-7: PCR Side Channel Fisheries <sup>1</sup>           |      |      | Del  | Del  | Del  | ✓    | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-1: PCR Aerial Photos <sup>1</sup>                  | ✓    | ✓    | ✓    | ✓    |      |      | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-3: PCR Side Channels <sup>1</sup>                  | Del  | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-4: PCR Hydraulic Habitat                           | Del  | ✓    | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-5: PCR Hydraulic Model                             | Del  | ✓    | ✓    | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-6: PCR Mainstem Stage Discharge                    | Del  | ✓    | ✓    | ✓    | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-7: PCR Riparian Habitat Assessment                 |      |      | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-10: PCR Industry & Taylor Water Quality Assessment | Del  | ✓    | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-13: PCR Recreation Access                          | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-29 Lynx Creek Boat Launch Maintenance              |      |      | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    | ✓    | u/w* | ■*   |      |      |      |      |      |      |      |      |
| GMSWORKS-30 Taylor Boat Launch Design                       |      |      | ✓    | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-38 Taylor Boat Launch Construction                 |      |      |      |      | ✓    | ✓F   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-40 Blackfoot Park Boat Launch Design               |      |      | ✓    | ✓    | ✓    | •    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-41 Halfway River Boat Launch Design <sup>1</sup>   |      |      | ✓    | ✓    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-48 Blackfoot Park Boat Launch Construction         |      |      |      |      |      | •    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-52 Halfway River Boat Launch Maintenance           |      |      |      |      |      | ✓    | ✓    | ✓    | ✓    | ✓    | u/w* | ■*   |      |      |      |      |      |      |      |      |
| GMSWORKS-55 Blackfoot Park Boat Launch Maintenance          |      |      |      |      |      | •    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| GMSWORKS-63 Taylor Boat Launch Maintenance                  |      |      |      |      |      | ✓*   | ✓*   | ✓*   | ✓    | ✓    | u/w* | ■*   | ■*   | ■*   | ■*   | ■*   | ■*   | ■*   | ■*   | ■*   |

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Project to be undertaken/initiated in identified year

Project is completed for the year

Project is under way

Maintenance only in identified year

Relief granted; Project cancelled

Project not undertaken as planned for this year

Project is delayed for the year

All field work for this project is complete. No further field work is planned.

Footnotes:

1. Projects suspended as per CWR due to Site C

2. Project partially suspended as per CWR due to Site C

## **4 Monitoring Programs and Physical Works Terms of Reference**

The monitoring programs and physical works being implemented under the Peace River Management Plan WUP are described in Terms of Reference (TOR). These Terms of Reference and the reports for work completed to date can be found here:

[https://www.bchydro.com/about/sustainability/conservation/water\\_use\\_planning/northern\\_interior/peace\\_river/recreational\\_access.html](https://www.bchydro.com/about/sustainability/conservation/water_use_planning/northern_interior/peace_river/recreational_access.html)

## **5 Status of Monitoring Programs**

### **5.1 GMSMON-1 Peace River Creel Survey**

The objective of this project was to monitor fishing pressure due to sport fishing to aid in evaluating the effectiveness of operational changes or physical works projects designed to improve fish habitat and fish productivity.

At the same time as this project was undertaken, the Site C Phase 2 environmental investigations were also conducting a creel survey. The WUP survey was delayed until completion of the Site C survey, as the scope and budget exceeded the WUP survey. The Site C survey was unable to account for high variability and detect changes in fish populations, thereby indicating that the scope, schedule and budget for the WUP survey would be insufficient to answer the management questions. As a result, this project is cancelled as per the CWR approval on November 23, 2011.

### **5.2 GMSMON-2 Peace River Fish Index**

The purpose of this monitoring project was to understand trial side channel effectiveness as demonstrated through changes in fish populations. This monitoring project commenced in 2008 and was to be undertaken every year for ten years (completing in 2017). However, as the area for this project is located in the future Site C inundation zone and the outcome of the indexing will not be applicable to a reservoir environment; this project has been suspended as per the CWR letter of September 8, 2015.

### **5.3 GMSMON-5 Peace River Productivity**

This monitoring project was designed to evaluate the side channel effectiveness through any observed changes in periphyton communities. This monitoring project commenced in 2013. However, as the area for this project is located in the future Site C inundation zone and the outcome of the project will not be applicable to a reservoir environment; this project has been suspended as per the CWR letter of September 8, 2015.

### **5.4 GMSMON-7 Peace River Side Channel Fisheries**

The purpose of this monitoring project was to monitor side channel fisheries habitat to assess the efficacy of the trial side channel enhancements (GMSWORKS-3) and inform flow regime decisions at Peace Canyon Generating Station. Work commenced in 2013 with the collection of baseline information. The works at location Site 102.5R were completed in spring of 2014 and one year of post-construction information was collected. However, as the area for this

project is located in the future Site C inundation zone and the outcome of the project will not be applicable to a reservoir environment; this project has been suspended as per the CWR letter of September 8, 2015.

## **6 Status of Physical Works**

### **6.1 GMSWORKS-1 Peace River Aerial Photos**

The objective of this opportunistic project was to document the effect of Peace River inundation of shoreline and riparian areas to inform the flood pulse management plan. This work was initiated in October 2008, and the first complete set of photos for all required flows was completed by 2011. A second set of photos were planned to be undertaken in 2016. However, as the area for this project is located in the future Site C inundation zone and the outcome of the study will not be applicable to a reservoir environment; this project has been suspended as per the CWR letter of September 8, 2015.

### **6.2 GMSWORKS-3 Peace River Side Channels**

The purpose of this project was to improve fisheries habitat and productivity in Peace River side channels. The inventory work associated with this project was initiated in May 2009 and was completed in January 2010. A final report for the inventory stage was completed in May 2010.

Site selection continued in 2011, and sites (32L and 102.5R) were approved by the CWR on July 28, 2011. It was later determined that as Site 32L was within the future inundation zone for Site C, it was subsequently dropped from the project.

Construction at Site 102.5R was completed in April 2014. Inspections occurred in 2014 and 2015 assessed functionality, bank stability, vegetation, and erosion. The biological monitoring of this project was undertaken in GMSMON-7.

As per the CWR letter of September 8, 2015, this project was suspended.

### **6.3 GMSWORKS-4 Peace River Hydraulic Habitat**

The objective of this project was to estimate hydraulic habitat types as a function of flow, in order to quantify fish habitat in the Peace River at several steady state discharges. The study involved using aerial photos for different flows, determining habitat types into a GIS-based mapping system, and developing a modelling of hydraulic habitat as a function of flow.

This project was initiated in 2009 and was completed in 2012.

### **6.4 GMSWORKS-5 Peace River Hydraulic Model**

The purpose of this project was to develop a hydraulic model to support side channel habitat restoration projects. The project involved surveying cross sections between Peace Canyon Dam and the Pine River and incorporating other available modelling and data.

This project commenced in 2009 and was completed in 2013.

## **6.5 GMSWORKS-6 Peace River Mainstem Stage Discharge**

The purpose of this project was to establish stage discharge relationships at points along the Peace River. Five hydrometric stations were installed for long term flow monitoring to allow correlation of side channel inundation with mainstem discharge, and to provide data for calibration and validation of a numerical model (under GMSWORKS-5). Station locations were selected based on channel stability, hydraulic control, and proximity to other hydrometric gauges, tributaries, and side channel complexes.

This project was initiated in 2009. In 2013, the CWR approved a TOR addendum that reduced the study duration to five years as the original ten-year duration of the project was not required to reach the objective. This project was completed in 2014.

## **6.6 GMSWORKS-7 Peace River Riparian Habitat Assessment**

The purpose of this project was to assess the vegetation community in the riparian zone with respect to flood-dependent species, advancement of vegetation on river bars, and loss or receding of vegetation in other areas.

Work on this project was initiated in 2010 and completed in 2012.

## **6.7 GMSWORKS-10 Peace River Industry and Taylor Water Quality Assessment**

The purpose of this project was to investigate hydraulic effects that may occur when the Peace River flows are reduced during the Pine River freshet. The study consisted of a review of available information, interviews with industrial and municipal stakeholders, site reconnaissance, and collection of field data related to bathymetric surveys, turbidity profiles, suspended sediment concentrations, and sampling of the dredged material from the river intake.

This project was initiated in 2009 and completed in 2012.

## **6.8 GMSWORKS-13 Peace River Recreational Access**

The objective of this feasibility study was to evaluate options for improving recreational access on the Peace River. The WUP Order contained requirements for feasibility studies for Lynx Creek, Halfway River, Peace Island Park and Clayhurst/Blackfoot Regional Park. However, two boat launches (Lynx and Taylor (Peace Island Park)) had already been constructed by the time the WUP Order was issued. In 2010, the CWR acknowledged that as Lynx and Taylor had been constructed, no additional feasibility study (per Order Schedule C.2 a) was required for these two boat launches<sup>1</sup>.

The feasibility study was completed in March 2010 for a site within the Blackfoot Regional Park, the existing location of the Halfway River boat launch plus two other alternate sites near Halfway River. The alternate sites were not recommended and it was recommended to progress to additional design and investigations at both existing boat launch locations.

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<sup>1</sup> Concerns were subsequently identified and additional work was undertaken in GMSWORKS-30, 38 and 52 described below.

The next phase of design work for Halfway and Blackfoot Park boat launches was completed under GMSWORKS-41 and GMSWORKS-40, respectively, described further below.

This project is complete.

#### **6.9 GMSWORKS-29 Lynx Creek Boat Launch Maintenance**

This project is for the ongoing maintenance of the Lynx Creek boat launch.

The Lynx Creek boat ramp was constructed prior to the completion of the Peace WUP.

Annual maintenance of the existing boat launch will continue in accordance with the TOR approved by the CWR on May 7, 2010, which covers the period to 2019.

#### **6.10 GMSWORKS-30 Taylor Boat Launch Design**

This project covered the design of the ramp at Taylor in Peace Island Park, located 15 km southeast of Fort St. John on the south bank of the Peace River.

BC Hydro constructed the ramp at Peace Island Park prior to completion of the Peace WUP. By 2010, BC Hydro had identified significant deficiencies on the ramp, and outlined extensive repair works including placement of rip-rap and lock-blocks to prevent undercutting. On May 7, 2010, the CWR approved these repairs.

Between 2010 and 2012, BC Hydro undertook an additional engineering assessment followed by community engagement, and recommended replacement of the ramp with a new orientation angled with the flow of the Peace River, that would allow the ramp to be maintained to an acceptable level of safety. Emergency works were completed in 2012 so that the ramp would be usable that summer. The CWR approved construction in 2012 under GMSWORKS-38 described further below. Ongoing maintenance of the Taylor ramp is covered by GMSWORKS-63.

This project is complete.

#### **6.11 GMSWORKS-38 Taylor Boat Launch Construction**

This project was for the construction of the new ramp at Taylor (Peace Island Park) following the design work undertaken in GMSWORKS-30.

Construction commenced in September 2012 and the concrete ramp was in-service by the end of March 2013. This project is complete.

Maintenance of the Taylor boat launch is covered by GMSWORKS-63.

#### **6.12 GMSWORKS-40 Blackfoot Park Boat Launch Design**

This project was for the design phase for the boat ramp upgrade at Blackfoot Regional Park. The park is located close to the Alberta border immediately downstream (east) of the Clayhurst Road Bridge.

Following feasibility investigations, BC Hydro concluded that flooding issues related to the topography of the site would affect the feasibility of upgrade options. Additionally, due to the complexity of constructing within the Peace

River, any boat ramp construction in the river would be extremely costly. Moreover, given the proximity to the nearby Taylor boat launch (recently upgraded under GMSWORKS-38), this launch was expected to have low use.

Consequently, on October 10, 2013, the CWR granted relief from further design under this project, construction (under GMSWORKS-48) and from maintenance (under GMSWORKS-55) on the Blackfoot Park boat launch facilities.

The project is complete.

#### **6.13 GMSWORKS-41 Halfway River Boat Launch Design**

This project was for the design of the Halfway River boat launch.

The existing Halfway River boat launch is located immediately south (downstream) of the Highway 29 Bridge over the Halfway River on the east bank.

The feasibility was undertaken in GMSWORKS-13, and preliminary designs for improvements the existing boat launch were developed in 2011.

On April 3, 2012, following agreement between local stakeholders and BC Hydro, the CWR approved suspending this project pending Site C developments. Maintenance at the current site occurs under GMSWORKS-52 discussed further below.

#### **6.14 GMSWORKS-48 Blackfoot Park Boat Launch Construction**

This project was for the construction costs associated with the boat ramp at Blackfoot Park. As discussed in GMSWORKS-40 above, on October 10, 2013, the CWR granted relief from construction at the Blackfoot Park boat launch.

The project is complete.

#### **6.15 GMSWORKS-52 Halfway River Boat Launch Maintenance**

This project is for the ongoing maintenance of the Halfway River boat launch.

Annual maintenance of the existing boat launch will continue according the CWR letter dated April 3, 2012, until BC Hydro makes further submissions on this or the GMSWORKS-41 (Halfway River Boat Launch Design) project.

#### **6.16 GMSWORKS-55 Blackfoot Park Boat Launch Maintenance**

This project was intended for the ongoing maintenance of the Blackfoot Park boat launch. As indicated in GMSWORKS-40 and -48 above, on October 10, 2013, the CWR granted relief for any further maintenance at the Blackfoot Park boat ramp.

This project is complete.

#### **6.17 GMSWORKS-63 Taylor Boat Launch Maintenance**

This project is for the ongoing maintenance of the Taylor boat launch located in Peace Island Park. Design was undertaken in GMSWORKS-30 and construction under GMSWORKS-38.

On March 27, 2018, BC Hydro submitted a revised TOR for maintenance of the boat launch until 2027. The resubmission included a defined area of



responsibility for the area and a structural maintenance budget. CWR approved resubmission on May 24, 2018.

Annual maintenance on the upgraded boat launch at Taylor will continue, which includes periodic engineering inspections.

## **7 Monitoring Programs and Physical Works Costs**

The following table summarizes the Peace River Management Plan WUP monitoring programs and physical works costs approved by the Comptroller and the Actual Costs to July 31, 2018.

Table 7-1:     Peace River Management Plan WUP Monitoring Programs and Physical Works Costs

|  | Costs<br>approved by<br>CWR | Life to Date<br>Actuals (LTD) | Estimated to<br>Complete<br>(Forecast) | Total Forecast<br>(LTD and<br>Forecast) | Variance Total to<br>Approved | Explanation  |
|--|-----------------------------|-------------------------------|--|---|-------------------------------|--|
| Monitoring Programs & Physical Works     |                             |                               |  |   |                               |  |
| GMSM01A PCR Creel Survey                 | \$9,937                     | \$9,938                       | \$0                                    | \$9,938                                 | \$0                           | Project cancelled  |
| GMSM01A PCR Creel Survey - OR DM         | \$9,937                     | \$9,938                       |  | \$9,938                                 |                               |  |
| GMSM01A PCR Creel Survey - OR Imp        | \$0                         |                               |  |   |                               |  |
| GMSM02A PCR Fish Index                   | \$2,285,174                 | \$1,497,949                   | \$667                                  | \$1,498,616                             | \$786,558                     | Project suspended. Forecast reflects outstanding completion report.                                |
| GMSM02A PCR Fish Index - OR DM           | \$112,133                   | \$62,458                      | \$667                                  | \$63,124                                | \$49,009                      |  |
| GMSM02A PCR Fish Index - OR Imp          | \$2,173,041                 | \$1,435,492                   |  | \$1,435,492                             | \$737,549                     |  |
| GMSM05A PCR Productivity                 | \$1,133,979                 | \$227,481                     | \$1,280                                | \$228,761                               | \$905,218                     | Project suspended. Forecast reflects outstanding completion report.                                |
| GMSM05A PCR Productivity - OR DM         | \$129,576                   | \$35,223                      | \$1,280                                | \$36,503                                | \$93,073                      |  |
| GMSM05A PCR Productivity - OR Imp        | \$1,004,403                 | \$192,258                     |  | \$192,258                               | \$812,145                     |  |
| GMSM07A PCR Side Channel Fish            | \$841,652                   | \$233,831                     | \$1,880                                | \$235,712                               | \$605,940                     | Project suspended.   |
| GMSM07A PCR Side Channel Fish - OR DM    | \$148,761                   | \$41,819                      | \$1,880                                | \$43,700                                | \$105,061                     |  |
| GMSM07A PCR Side Channel Fish - OR Imp   | \$692,891                   | \$192,012                     |  | \$192,012                               | \$500,879                     |  |
| GMSW01A PCR Aerial Photos                | \$709,995                   | \$231,500                     | \$1,880                                | \$233,381                               | \$476,614                     | Project suspended.   |
| GMSW01A PCR Aerial Photos - OR DM        | \$15,318                    | \$9,963                       | \$1,880                                | \$11,844                                | \$3,474                       |  |
| GMSW01A PCR Aerial Photos - OR Imp       | \$694,677                   | \$221,537                     |  | \$221,537                               | \$473,140                     |  |
| GMSW03A PCR Trial Side Chan              | \$2,477,678                 | \$1,254,389                   | \$1,333                                | \$1,255,722                             | \$1,221,956                   | Project suspended before second site constructed. Forecast reflects outstanding completion report. |
| GMSW03A PCR Trial Side Chan - OR DM      | \$48,977                    | \$54,444                      | \$1,333                                | \$55,777                                | (\$6,800)                     |  |
| GMSW03A PCR Trial Side Chan - OR Imp     | \$2,428,701                 | \$1,199,945                   |  | \$1,199,945                             | \$1,228,756                   |  |
| GMSW04A PCR Hydraulic Habit              | \$134,816                   | \$134,816                     | \$1,880                                | \$136,696                               | (\$1,880)                     | Project complete   |
| GMSW04A PCR Hydraulic Habit - OR DM      | \$17,728                    | \$17,727                      | \$1,880                                | \$19,608                                | (\$1,880)                     |  |
| GMSW04A PCR Hydraulic Habit - OR Imp     | \$117,088                   | \$117,088                     |  | \$117,088                               | \$0                           |  |
| GMSW05A PCR Hydraulic Model              | \$270,648                   | \$210,659                     | \$1,880                                | \$212,539                               | \$58,109                      | Project suspended. Forecast reflects outstanding completion report.                                |
| GMSW05A PCR Hydraulic Model - OR DM      | \$31,742                    | \$30,994                      | \$1,880                                | \$32,874                                | (\$1,132)                     |  |
| GMSW05A PCR Hydraulic Model - OR Imp     | \$238,906                   | \$179,665                     |  | \$179,665                               | \$59,241                      |  |
| GMSW06A PCR Mainstem Stage               | \$306,437                   | \$295,755                     | \$1,880                                | \$297,636                               | \$8,802                       | Project suspended. Forecast reflects outstanding completion report.                                |
| GMSW06A PCR Mainstem Stage - OR DM       | \$39,515                    | \$33,755                      | \$1,880                                | \$35,636                                | \$3,879                       |  |
| GMSW06A PCR Mainstem Stage - OR Imp      | \$266,922                   | \$262,000                     |  | \$262,000                               | \$4,922                       |  |
| GMSW07A PCR Riparian Habit               | \$181,857                   | \$153,336                     | \$1,880                                | \$155,217                               | \$26,640                      | Project suspended.   |
| GMSW07A PCR Riparian Habit - OR DM       | \$22,854                    | \$31,569                      | \$1,880                                | \$33,449                                | (\$10,595)                    |  |
| GMSW07A PCR Riparian Habit - OR Imp      | \$159,003                   | \$121,768                     |  | \$121,768                               | \$37,235                      |  |
| GMSW10A PCR Industry & Tay               | \$220,253                   | \$159,484                     | \$1,880                                | \$161,364                               | \$58,889                      | Project suspended.   |
| GMSW10A PCR Industry & Tay - OR DM       | \$69,761                    | \$26,652                      | \$1,880                                | \$28,533                                | \$41,228                      |  |
| GMSW10A PCR Industry & Tay - OR Imp      | \$150,492                   | \$132,832                     |  | \$132,832                               | \$17,660                      |  |
| GMSW13A PCR Recreation Acc               | \$326,409                   | \$131,146                     | \$1,880                                | \$133,026                               | \$193,383                     | Project suspended.   |
| GMSW13A PCR Recreation Acc - OR DM       | \$96,825                    | \$16,632                      | \$1,880                                | \$18,512                                | \$78,313                      |  |
| GMSW13A PCR Recreation Acc - OR Imp      | \$229,584                   | \$114,514                     |  | \$114,514                               | \$115,070                     |  |
| GMSW29A Lynx Creek BL Maintenance        | \$280,376                   | \$8,331                       | \$11,585                               | \$19,916                                | \$260,460                     | Budget includes contingency that has not been used   |
| GMSW29A Lynx Creek BL Maintenance- OR DM | \$91,709                    | \$4,554                       | \$1,585                                | \$6,139                                 | \$85,570                      |  |
| GMSW29A Lynx Creek BL Maintenance OR Imp | \$188,667                   | \$3,777                       | \$10,000                               | \$13,777                                | \$174,890                     |  |
| GMSW30A Taylor BL Design                 | \$260,501                   | \$256,014                     |  | \$256,014                               | \$4,487                       | Project complete   |
| GMSW30A Taylor BL Design - OR DM         | \$2,641                     | \$21,005                      |  | \$21,005                                | (\$18,364)                    |  |
| GMSW30A Taylor BL Design - OR Imp        | \$257,860                   | \$235,009                     |  | \$235,009                               | \$22,851                      |  |
| GMSW38A Taylor BL Construction           | \$5,408,200                 | \$5,404,955                   |  | \$5,404,955                             | \$3,245                       | Project complete   |
| GMSW38A Taylor BL Construction - OR DM   | \$145,100                   | \$36,392                      |  | \$36,392                                | \$108,708                     |  |
| GMSW38A Taylor BL Construction - OR Imp  | \$5,263,100                 | \$5,368,563                   |  | \$5,368,563                             | (\$105,463)                   |  |
| GMSW40A BRD Blackfoot Park BL            | \$93,732                    | \$93,732                      |  | \$93,732                                | \$0                           | Project cancelled  |
| GMSW40A BRD Blackfoot Park BL- OR DM     | \$17,508                    | \$17,508                      |  | \$17,508                                |                               |  |
| GMSW40A BRD Blackfoot Park BL- OR Imp    | \$76,224                    | \$76,224                      |  | \$76,224                                |                               |  |
| GMSW41A BRD Halfway R BL Design          | \$0                         | \$52,642                      |  | \$52,642                                | (\$52,642)                    | Project suspended. Costs are associated with design work prior to suspension.                      |
| GMSW41A BRD Halfway R BL Design - OR DM  | \$0                         | \$11,093                      |  | \$11,093                                | (\$11,093)                    |  |
| GMSW41A BRD Halfway R BL Design - OR Imp | \$0                         | \$41,549                      |  | \$41,549                                | (\$41,549)                    |  |
| GMSW48A BRC Blackfoot Pk BL Maint        | \$45,481                    | \$45,481                      |  | \$45,481                                | (\$0)                         | Project cancelled  |
| GMSW48A BRC Blackfoot Pk BL Maint- OR DM | \$5,026                     | \$5,026                       |  | \$5,026                                 | (\$0)                         |  |
| GMSW48A BRC Blackfoot Pk BL Maint-OR Imp | \$40,455                    | \$40,455                      |  | \$40,455                                | (\$0)                         |  |
| GMSW52A Halfway River BL Maintenance     | \$180,000                   | \$49,428                      | \$67,657                               | \$117,084                               | \$62,916                      | Budget includes contingency that has not been used   |
| GMSW52A Halfway River BL Design - OR DM  | \$0                         | \$10,676                      | \$7,657                                | \$18,333                                | (\$18,333)                    |  |
| GMSW52A Halfway River BL - OR Imp        | \$180,000                   | \$38,751                      | \$60,000                               | \$98,751                                | \$81,249                      |  |
| GMSW55A Blackfoot BL Maintenance         | \$0                         |                               |  | \$0                                     | \$0                           | Project cancelled  |
| GMSW55A Blackfoot BL Maintenance - OR DM | \$0                         |                               |  |   | \$0                           |  |
| GMSW55A Blackfoot BL Maintenance- OR Imp | \$0                         |                               |  |   | \$0                           |  |
| GMSW63A Taylor BL Maintenance            | \$566,951                   | \$66,619                      | \$119,411                              | \$186,030                               | \$380,921                     | Budget includes contingency that has not been used   |
| GMSW63A Taylor BL Maintenance - OR DM    | \$38,731                    | \$22,418                      | \$13,811                               | \$36,229                                | \$2,502                       |  |
| GMSW63A Taylor BL Maintenance - OR Imp   | \$528,220                   | \$44,201                      | \$105,600                              | \$149,801                               | \$378,419                     |  |

OR - Ordered Remissible  
ONR - Ordered Non-Remissible

\* Red values in parentheses denote overage.