

Peace River Water Use Plan Peace River Management Plan

Monitoring Programs and Physical Works Annual Report 2016

Implementation Period: June 2015 to July 2016

- **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**
- **GMSWORKS-30 Peace Island Park**
- **GMSWORKS-38 Taylor Boat Ramp Construction**
- **GMSWORKS-40 Boat Ramp Design Blackfoot Park**
- **GMSWORKS-41 Boat Ramp Design Halfway River**
- **GMSWORKS-48 Boat Ramp Blackfoot Park**
- **GMSWORKS-52 Boat Ramp Halfway River**
- **GMSWORKS-55 Blackfoot Park Maintenance**
- **GMSWORKS-63 Taylor Maintenance**

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

August 31, 2016

BC Hydro Peace River Water Use Plan Peace River Management Plan Annual Report: 2016

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, 2016, 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 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	2015-07-024	Sep 8, 2015 approval to suspend
GMSMON-7 PCR SIDE CHANNEL FISHERIES	Schedule C.4.d	Feb 07, 2008	Apr 02, 2008	2015-07-024	Sep 8, 2015 approval to suspend
GMSWORKS-1 PCR AERIAL PHOTOS	Schedule C.1	May 09, 2008	Jun 02, 2008	2015-07-024	Sep 8, 2015 approval to suspend
GMSWORKS-3 PCR TRIAL SIDE CHANNELS	Schedule C.1.a	May 09, 2008	Jun 02, 2008	2015-07-024	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	Schedule C.2.a	Apr 16, 2010	May 07, 2010		
GMSWORKS-30 BOAT RAMP DESIGN TAYLOR (Peace Island)	Schedule C.2.c	Apr 16, 2010	May 07, 2010	Jul 25, 2012	Aug 02, 2012
GMSWORKS-38 BOAT RAMP TAYLOR (Peace Island)	Schedule C.2.c	Jul 25, 2012	Aug 02, 2012	Oct 30, 2013	Nov 05, 2013
GMSWORKS-40 BOAT RAMP DESIGN BLACKFOOT PARK	Schedule C.2.d	Apr 15, 2010	Jun 28, 2010	Aug 19, 2013	Oct 10, 2013 Approval to cancel
GMSWORKS-41 BOAT RAMP DESIGN HALFWAY RIVER	Schedule C.2.b	Apr 15, 2010	Jun 28, 2010	Apr 18, 2011	Apr 3, 2012 Deferred until Site C decision
GMSWORKS-48 BOAT RAMP BLACKFOOT PARK	Schedule C.2.d	Apr 18, 2011	Apr 3, 2012 Deferred	Aug 19, 2013	Oct 10, 2013 Approval to cancel
GMSWORKS-52 BOAT RAMP HALFWAY RIVER	Schedule C.2.b	Apr 18, 2011	Apr 03, 2012		
GMSWORKS-55 BLACKFOOT PARK MAINTENANCE	Schedule C.2.d	Apr 18, 2011	Apr 3, 2012 Deferred	Aug 19, 2013	Cancelled Oct 10, 2013
GMSWORKS-63 TAYLOR MAINTENANCE (Peace Island)	Schedule C.2.c	Jul 25, 2012	Aug 1, 2012 Not approved	Jun 10, 2013	Jun 20, 2013

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, 2016

Monitoring Programs and Physical Works	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
	WLR YR1	WLR YR2	WLR YR3	WLR YR4	WLR YR5	WLR YR6	WLR YR7	WLR YR8	WLR YR9	WLR YR10	WLR YR11	WLR YR12	WLR YR13	WLR YR14
GMSMON-1: PCR Creel Survey				*	*	Cancelled								
GMSMON-2: PCR Fish Index ¹	✓	✓	✓	✓	✓	✓	✓							
GMSMON-5: PCR Productivity ¹			Del ²	Del ²	Del ²	✓	✓							
GMSMON-7: PCR Side Channel Fisheries ¹			Del ²	Del ²	Del ²	✓	✓							
GMSWORKS-1: PCR Aerial Photos ¹	✓	✓	✓	✓										
GMSWORKS-3: PCR Side Channels ³	Del	✓	✓		✓	✓	✓							
GMSWORKS-4: PCR Hydraulic Habitat	Del	✓	✓	✓	✓									
GMSWORKS-5: PCR Hydraulic Model	Del	✓	✓	✓	✓	✓								
GMSWORKS-6: PCR Mainstem Stage Discharge	Del	✓	✓	✓	✓	✓	✓							
GMSWORKS-7: PCR Riparian Habitat Assessment			✓	✓	✓									
GMSWORKS-10: PCR Industry & Taylor Water Quality Assessment	Del	✓	✓	✓	✓									
GMSWORKS-13: PCR Recreation Access	✓	✓	✓											
GMSWORKS-29 Lynx Creek Boat Launch Maintenance			✓	✓	✓	✓	✓	✓	u/w *	■*	■*	■*	■*	■*
GMSWORKS-30 Taylor Boat Launch Design			✓	✓	✓									
GMSWORKS-38 Taylor Ramp Construction					✓	✓								
GMSWORKS-40 Boat Ramp Design Blackfoot Park			✓	✓	✓	Cancelled								
GMSWORKS-41 Boat Ramp Design Halfway River			✓	✓										
GMSWORKS-48 Boat Ramp Blackfoot Park						Cancelled								
GMSWORKS-52 Boat Ramp Halfway River						✓	✓	✓	u/w *	■*	■*	■*	■*	■*
GMSWORKS-55 Blackfoot Park Maintenance						Cancelled								
GMSWORKS-63 Taylor Maintenance						✓*	✓*	✓*	u/w *	■*	■*	■*	■*	■*
Legend	■ Program to be undertaken/initiated in identified year							■ Opportunistic Program may be undertaken in identified year						
	u/w Project is under way							* Project not undertaken as planned for this year						
	✓ Project is completed for the year							Del Project is delayed for the year						
	* Maintenance only in identified year													

Footnotes:

1. Projects suspended as per CWR due to Site C
2. Delayed due to delay of corresponding WORKS projects
3. 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. 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

5 Status of Monitoring Programs

5.1 GMSMON-1 Peace River Creel Survey

This project cancelled as per the Comptroller of Water Rights (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 was 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 was 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. This project was 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 was 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 study was 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.

Construction work at the first of two trial sites, Site 102.5R, was completed in spring 2014. Some erosion issues have been identified and will continue to be monitored.

The second trial site (32L) is located between the Peace Canyon Dam and the Pine Review confluence and within the future inundation zone for Site C. As per the CWR letter of September 8, 2015, future physical works on this project were 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. 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 modeling capability for the Peace River between Peace Canyon Dam and the confluence of the Pine River. This project was commenced in 2009 and 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. 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 was 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. This project was initiated in 2009 and was 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 ramps (Lynx and Taylor (Peace

Island Park)) had already been constructed by the time the WUP Order was issued. Thus the feasibilities were undertaken for the Blackfoot and Halfway River locations as part of this project.

This feasibility study was completed in 2010, with additional feasibility work on Blackfoot in 2012. This project is complete.

6.9 GMSWORKS-29 Lynx Creek Boat Ramp

The Lynx Creek boat ramp was constructed outside of the WLR process in 2008. It is a small ramp located on BC Hydro property, about 7 km from Hudson's Hope. It is constructed of pre-cast concrete panels with upstream rock groynes to deflect river currents and reduce erosion around the ramp.

In 2010, the CWR acknowledged that as the ramp had been constructed no additional feasibility study (per Order Schedule C.2 a) was required.

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

6.10 GMSWORKS-30 Peace Island Park Boat Ramp (Taylor)

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. It is situated less than 100 m upstream of the Highway 97 bridge that crosses the Peace River and less than 2 km downstream of the Pine River confluence.

An existing ramp at this location was constructed prior to the WUP. In 2010, BC Hydro undertook an engineering assessment followed by community engagement, and recommended replacement of the ramp with a new orientation angled with the flow of the Peace River.

The leave to commence construction was issued by the CWR in 2012 and construction was undertaken under GMSWORKS-38 described further below. This project is complete.

6.11 GMSWORKS-38 Taylor Boat Ramp 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 ramp was in-service by the end of March 2013. This project is complete.

Maintenance of the Taylor ramp is covered by GMSWORKS-63.

6.12 GMSWORKS-40 Boat Ramp Design - Blackfoot Park

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

The feasibility of upgrades for this ramp was undertaken in GMSWORKS-13.

The preliminary design was developed for this ramp in 2011. In 2013, following additional assessments, BC Hydro concluded that flooding issues related to the topography of the site would affect the feasibility of upgrade options.

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

The project is complete.

6.13 GMSWORKS-41 Boat Ramp Design - Halfway River

This project was for the design of the Halfway River boat ramp. The Halfway River existing boat launch is located immediately south (downstream) of the Highway 29 Bridge over the Halfway River on the east bank. The site is located approximately halfway between Hudson's Hope and Fort St John.

The feasibility was undertaken in GMSWORKS-13, which identified multiple locations. Preliminary designs were developed in 2011.

On April 3, 2012, following agreement between local stakeholders and BC Hydro, the CWR approved delaying development of this boat launch further pending Site C developments. Until such time, ongoing maintenance will continue under GMSWORKS-52.

6.14 GMSWORKS-48 Boat Ramp Blackfoot Park

This project was for the construction costs associated with the boat ramp at Blackfoot Park. As identified during the design phase in GMSWORKS-40, issues associated with the site topography and the flow of the river impacted the feasibility of proposed upgrades.

Consequently on October 10, 2013, the CWR granted relief from further design (GMSWORKS-40) and construction and maintenance (GMSWORKS-55) on the Blackfoot Park boat launch facilities.

The project is complete.

6.15 GMSWORKS-52 Boat Ramp Halfway River

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

6.16 GMSWORKS-55 Blackfoot Park Maintenance

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 Maintenance

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

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, 2016.

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

Monitoring Programs	Costs approved by CWR	Life to Date Actuals (LTD)	Estimated to Complete (Forecast)	Total Forecast (LTD and Forecast)	Variance Total to Approved	Explanation	Corrective Action
GMSM01A PCR Creel Survey	\$9,937	\$9,938	\$0	\$9,938	(\$1)	Project Cancelled	
GMSM01A PCR Creel Survey - OR DM	\$9,937	\$9,938	\$0	\$9,938	(\$1)		
GMSM01A PCR Creel Survey - OR Imp	\$0		\$0	\$0	(\$0)		
GMSM02A PCR Fish Index	\$2,285,174	\$1,496,738	\$2,138	\$1,498,875	\$786,299	Project Suspended - Final completion reporting outstanding	
GMSM02A PCR Fish Index - OR DM	\$112,133	\$61,246	\$2,138	\$63,384	\$48,749		
GMSM02A PCR Fish Index - OR Imp	\$2,173,041	\$1,435,492		\$1,435,492	\$737,549		
GMSM05A PCR Productivity	\$1,133,979	\$227,210	\$2,112	\$229,323	\$904,656	Project Suspended - Final completion reporting outstanding	
GMSM05A PCR Productivity - OR DM	\$129,576	\$34,952	\$2,112	\$37,065	\$92,511		
GMSM05A PCR Productivity - OR Imp	\$1,004,403	\$192,258	\$0	\$192,258	\$812,145		
GMSM07A PCR Side Channel Fish	\$841,652	\$233,403	\$4,159	\$237,563	\$604,089	Project Suspended - Final completion reporting outstanding	
GMSM07A PCR Side Channel Fish - OR DM	\$148,761	\$41,392	\$4,159	\$45,551	\$103,210		
GMSM07A PCR Side Channel Fish - OR Imp	\$692,891	\$192,012	\$0	\$192,012	\$500,879		
GMSW01A PCR Aerial Photos	\$709,995	\$231,500	\$3,572	\$235,072	\$474,923	Project Suspended - Final completion reporting outstanding	
GMSW01A PCR Aerial Photos - OR DM	\$15,318	\$9,963	\$3,572	\$13,535	\$1,783		
GMSW01A PCR Aerial Photos - OR Imp	\$694,677	\$221,537	\$0	\$221,537	\$473,140		
GMSW03A PCR Trial Side Chan	\$2,477,678	\$1,244,485	\$43,772	\$1,288,257	\$1,189,421	Second trial site construction suspended	
GMSW03A PCR Trial Side Chan - OR DM	\$48,977	\$48,637	\$9,675	\$58,312	(\$9,335)		
GMSW03A PCR Trial Side Chan - OR Imp	\$2,428,701	\$1,195,848	\$34,097	\$1,229,945	\$1,198,756		
GMSW04A PCR Hydraulic Habit - OR L4	\$134,816	\$134,815		\$134,815	\$0	Project Complete	
GMSW04A PCR Hydraulic Habit - OR DM	\$17,728	\$17,727		\$17,727			
GMSW04A PCR Hydraulic Habit - OR Imp	\$117,088	\$117,088	\$0	\$117,088	\$0		
GMSW05A PCR Hydraulic Model	\$270,648	\$210,659	\$2,500	\$213,159	\$57,489	Project Complete	
GMSW05A PCR Hydraulic Model - OR DM	\$31,742	\$30,994	\$2,500	\$33,494	(\$1,752)		
GMSW05A PCR Hydraulic Model - OR Imp	\$238,906	\$179,665	\$0	\$179,665	\$59,241		
GMSW06A PCR Mainstem Stage	\$306,437	\$295,755	\$1,928	\$297,683	\$8,754	Project Complete	
GMSW06A PCR Mainstem Stage - OR DM	\$39,515	\$33,755	\$1,928	\$35,684	\$3,831		
GMSW06A PCR Mainstem Stage - OR Imp	\$266,922	\$262,000	\$0	\$262,000	\$4,922		
GMSW07A PCR Riparian Habit	\$181,857	\$153,336	\$2,232	\$155,569	\$26,288	Project Complete	
GMSW07A PCR Riparian Habit - OR DM	\$22,854	\$31,569	\$2,232	\$33,801	(\$10,947)		
GMSW07A PCR Riparian Habit - OR Imp	\$159,003	\$121,768	\$0	\$121,768	\$37,235		
GMSW10A PCR Industry & Tay	\$220,253	\$159,484	\$2,460	\$161,944	\$58,309	Project Complete	
GMSW10A PCR Industry & Tay - OR DM	\$69,761	\$26,652	\$2,460	\$29,112	\$40,649		
GMSW10A PCR Industry & Tay - OR Imp	\$150,492	\$132,832	\$0	\$132,832	\$17,660		
GMSW13A PCR Recreation Acc	\$326,409	\$130,138	\$3,220	\$133,358	\$193,051	Project Complete	
GMSW13A PCR Recreation Acc - OR DM	\$96,825	\$15,624	\$3,220	\$18,844	\$77,981		
GMSW13A PCR Recreation Acc - OR Imp	\$229,584	\$114,514	\$0	\$114,514	\$115,070		
GMSW29A Lynx Creek	\$280,376	\$8,072	\$12,419	\$20,491	\$259,885	Scope reduced from TOR - no feasibility study required	
GMSW29A Lynx Creek - OR DM	\$91,709	\$4,295	\$2,419	\$6,714	\$84,995		
GMSW29A Lynx Creek - OR Imp	\$188,667	\$3,777	\$10,000	\$13,777	\$174,890		
GMSW30A Taylor Ramp	\$260,501	\$255,463	\$1,110	\$256,573	\$3,928	Project Complete	
GMSW30A Taylor Ramp - OR DM	\$2,641	\$20,454	\$1,110	\$21,564	(\$18,923)		
GMSW30A Taylor Ramp - OR Imp	\$257,860	\$235,009		\$235,009	\$22,851		
GMSW38A Taylor Ramp Construct	\$5,408,200	\$5,404,060	\$977	\$5,405,037	\$3,163	Project Complete	
GMSW38A Taylor Ramp Construct - OR DM	\$145,100	\$35,497	\$977	\$36,475	\$108,625		
GMSW38A Taylor Ramp Construct - OR Imp	\$5,263,100	\$5,368,563		\$5,368,563	(\$105,463)		
GMSW40A BRD Blackfoot Park	\$93,732	\$94,702	\$2,176	\$96,878	(\$3,146)	Project Cancelled	
GMSW40A BRD Blackfoot Park - OR DM	\$17,508	\$17,508	\$2,176	\$19,684	(\$2,176)		
GMSW40A BRD Blackfoot Park - OR Imp	\$76,224	\$77,194	\$0	\$77,194	(\$970)		
GMSW41A BRD Halfway River	\$0	\$52,642	\$0	\$52,642	(\$52,642)	Project deferred pending construction of Site C. Costs associated with design prior to decision.	
GMSW41A BRD Halfway River - OR DM	\$0	\$11,093	\$0	\$11,093	(\$11,093)		
GMSW41A BRD Halfway River - OR Imp	\$0	\$41,549	\$0	\$41,549	(\$41,549)		
GMSW52A Halfway River	\$180,000	\$37,866	\$102,028	\$139,894	\$40,106	Efficiencies found	
GMSW52A Halfway River - OR DM	\$0	\$9,398	\$12,028	\$21,426	(\$21,426)		
GMSW52A Halfway River - OR Imp	\$180,000	\$28,469	\$90,000	\$118,469	\$61,531		
GMSW63A Taylor Maintenance	\$204,443	\$47,257	\$79,500	\$126,757	\$77,686	Efficiencies found	
GMSW63A Taylor Maintenance - OR DM	\$18,585	\$16,284	\$15,288	\$31,571	(\$12,986)		
GMSW63A Taylor Maintenance - OR Imp	\$185,858	\$30,974	\$64,212	\$95,186	\$90,672		
OR - Ordered Remissible ONR - Ordered Non-Remissible							

* Red values in parentheses denote overage.