

Peace River Water Use Plan

Monitoring Programs and Physical Works

Annual Report: 2014

For Implementation Year: June 2013 to May 2014

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

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BC Hydro Peace River Water Use Plan Annual Report: 2014

1 Introduction

This document summarizes the status of Peace Project Water Use Plan (WUP) physical work and monitoring program projects as of May 31, 2014. BC Hydro is required to provide this information to the Comptroller of Water Rights (CWR) pursuant to sections 7, 4, 5, and 4 of Schedules A, B, C, and D, respectively, to the Peace Order made by the CWR under section 88 of the *Water Act* and dated August 9, 2007 (the "Order").

Glossary:

BCH: BC Hydro

DNR: Dinosaur Reservoir.

GMS: Gordon M. Shrum Generating Station at WAC Bennett Dam.

FLNRO: Forests, Lands, and Natural Resource Operations.

PCN: Peace Canyon Dam.

PCR: Peace River.

PSP: The Peace Spill Protocol, a group of projects to be implemented in the event of spill releases of water from WAC Bennett Dam or Peace Canyon Dam. The PSP is described in detail in Appendix 3 of the WUP and is ordered pursuant to Schedule D of the Order.

TGP: Total dissolved gas pressure.

WLL: Williston Reservoir, also known as Williston Lake.

WUP Committee: The Peace Water Use Planning Committee as described in the Committee Report.

2 Status

The following table outlines the dates that TOR for the Peace Water Use Plan monitoring programs and physical works were submitted to and approved by the CWR.

Table 2-1 Dates of Peace 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-01 PCR CREEL SURVEY	Schedule C.4.a	Apr 10, 2008	Apr 28, 2008	Aug 26, 2011	Nov 23, 2011 Approval to cancel
GMSMON-02 PCR FISH INDEX	Schedule C.4.b	Apr 10, 2008	Apr 28, 2008		
GMSMON-03 PCR FISH STRANDING	Schedule D.3.a	Feb 07, 2008	Apr 02, 2008	Apr 29, 2013	May 22, 2013
GMSMON-04 WACB ENTRAINMENT	Schedule D.3.b	Feb 07, 2008	Apr 02, 2008	Apr 29, 2013	May 22, 2013
GMSMON-05 PCR PRODUCTIVITY	Schedule C.4.c	Aug 08, 2008	Sep 15, 2008	Aug 07, 2009	Jan 20, 2010
GMSMON-06 PCR RIPARIAN FLOODING	Schedule D.3.c	Feb 07, 2008	Apr 02, 2008		
GMSMON-07 PCR SIDE CHANNEL FISHERIES	Schedule C.4.d	Feb 07, 2008	Apr 02, 2008	Jun 27, 2011	Jul 28, 2011
GMSMON-08 PCR SIDE CHANNEL RESPONSE	Schedule D.3.d	Feb 07, 2008	Apr 02, 2008	Apr 29, 2013	May 22, 2013
GMSMON-09 PCR SPILL HYDROLOGY	Schedule D.3.e	Feb 07, 2008	Apr 02, 2008		
GMSMON-10 PCR SPILL PHOTOS	Schedule D.3.g	Feb 07, 2008	Apr 02, 2008	Mar 24, 2009	Mar 31, 2009
GMSMON-11 PCR SPILL TGP/TEMP	Schedule D.3.f	Feb 07, 2008	Apr 02, 2008	Apr 29, 2013	May 22, 2013
GMSMON-12 PCR WILDLIFE SURVEY	Schedule D.3.h	Feb 07, 2008	Apr 02, 2008	Apr 29, 2013	May 22, 2013
GMSMON-13 WLL FISH INDEX	Schedule D.e.i	Feb 07, 2008	Apr 02, 2008		
GMSMON-14 DNR TRIBUTARY HABITAT	Schedule B.e.a	Aug 08, 2008	Sep 15, 2008		
GMSMON-15 WLL WETLAND HABITAT	Schedule A.6.b	Aug 08, 2008	Sep 15, 2008		
GMSMON-16 WLL DEBRIS TRENDS	Schedule A.3.c, Schedule A.5.a	Nov 26, 2008	Dec 17, 2008	Jan 10, 2014	Deferred - BCH to provide further info
GMSMON-17 WLL TRIBUTARY HABITAT	Schedule A.6.c	Aug 08, 2008	Sep 15, 2008		
GMSMON-18 WLL DUST CONTROL	Schedule A.6.d	Apr 02, 2008	Apr 28, 2008	Apr 09, 2014	Pending
GMSMON-19 WLL EROSION CONTROL	Schedule A.6.e	Oct 03, 2011	Nov 16, 2011 delay TOR	Sep 24, 2013	Oct 8, 2013 delay TOR
GMSMON-20 WLL RECREATION USE	Schedule A.6.f	Aug 08, 2008	Sep 15, 2008		
GMSMON-21A WLL ARCHAEOLOGICAL OVERVIEW ASSESSMENT	Clause 7.a	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSMON-21B WLL EROSION MONITORING OF ARCHAEOLOGICAL RESOURCES	Clause 7.b	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-01 PCR AERIAL PHOTOS	Schedule C.1	May 09, 2008	Jun 02, 2008	Mar 24, 2009	Mar 31, 2009
GMSWORKS-02 PCR BASELINE TGP/TEMP	Schedule D.1	Feb 07, 2008	Apr 02, 2008		
GMSWORKS-03 PCR TRIAL SIDE CHANNELS	Schedule C.1.a	May 09, 2008	Jun 02, 2008	Feb 28, 2014	Mar 05, 2014
GMSWORKS-04 PCR HYDRAULIC HABITAT	Schedule C.1.b	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-05 PCR HYDRAULIC MODEL	Schedule C.1.b	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-06 PCR MAINSTEM STAGE DISCHARGE	Schedule C.1.b	May 09, 2008	Jun 02, 2008	Jun 27, 2013	Jul 11, 2013
GMSWORKS-07 PCR RIPARIAN HABITAT ASSESSMENT	Schedule C.1.c	Feb 07, 2008	Apr 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-08 DNR DEMONSTRATION TRIBUTARY	Schedule B.1.b	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-09 DNR TRIBUTARY INVENTORY & FEASIBILITY	Schedule B.1.a	May 09, 2008	Jun 02, 2008		
GMSWORKS-10 PCR INDUSTRY & TAYLOR WATER QUALITY ASSESSMENT	Schedule C.4.e	Nov 26, 2008	Dec 17, 2008		
GMSWORKS-12 DNR RECREATION ACCESS	Schedule B.2.a	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-13 PCR RECREATION ACCESS	Schedule C.2	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-14 WLL AIR PHOTOS & DEM	Schedule A.3.d	May 09, 2008	Jun 02, 2008		
GMSWORKS-16 WLL WETLAND INVENTORY	Schedule A.2.a	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-17 WLL TRIAL WETLANDS	Schedule A.2.a	May 09, 2008	Jun 02, 2008	Feb 25, 2014	Mar 13, 2014
GMSWORKS-18 WLL DEBRIS FIELD SURVEY	Schedule A.3.c	Nov 26, 2008	Dec 17, 2008	Jan 10, 2014	Feb 17, 2014
GMSWORKS-19 WLL TRIAL TRIBUTARY(S)	Schedule A.2.b	May 09, 2008	Jun 02, 2008	Feb 25, 2014	Mar 12, 2014
GMSWORKS-20 WLL DUST SOIL MAPPING	Schedule A.3.a	Apr 02, 2008	Apr 28, 2008	Apr 13, 2011	Jun 01, 2011
GMSWORKS-21 WLL DUST CONTROL TRIAL	Schedule A.3.a	Apr 02, 2008	Apr 28, 2008	Mar 04, 2014	Mar 13, 2014
GMSWORKS-22 WLL DEBRIS REMOVAL	Schedule A.3.c, Schedule A.5.a	Nov 26, 2008	Mar 23, 2009	Nov 26, 2008	Mar 23, 2009
GMSWORKS-23 WLL EROSION CONTROL TRIAL	Schedule A.3.b	Oct 03, 2011	Nov 16, 2011 delay TOR	Sep 24, 2013	Oct 8, 2013 delay TOR
GMSWORKS-24 WLL BOAT ACCESS	Schedule A.4	May 09, 2008	Jun 02, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-25 WLL BATHYMETRIC MAPPING	Schedule A.3.d	May 09, 2008	Jun 02, 2008	Jun 08, 2011	Oct 12, 2011
GMSWORKS-26 WLL COMMUNICATIONS/SAFETY	Schedule A.5.b, Schedule A.5.c, Schedule B.2.b, Schedule C.3.a	May 09, 2008	Jun 02, 2008	Aug 30, 2013	Sep 24, 2013
GMSWORKS-27 WLL FINLAY RIVER ACCESS INFORMATION PLAN	Schedule A.6.a	Aug 08, 2008	Sep 15, 2008	Aug 07, 2009	Jan 20, 2010
GMSWORKS-28 INDUSTRY FEASIBILITY AND DESIGN STUDY	Schedule A.1	Nov 30, 2009	Jan 11, 2010	Feb 05, 2013	Feb 13, 2013
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-31 KWADACHA (Fort Ware)	Schedule A.4.b	Apr 16, 2010	May 07, 2010		
GMSWORKS-32 BOAT RAMP DESIGN DESERTER'S DUMP		Apr 15, 2010	Jun 28, 2010		
GMSWORKS-33 BOAT RAMP DESIGN INGENIKA (Billy's Bay)	Schedule A.4.b	Apr 15, 2010	Jun 28, 2010	Apr 18, 2011	Apr 3, 2012 Deferred - TOR to be resubmitted
GMSWORKS-34 BOAT RAMP DESIGN FINLAY BAY	Schedule A.4.c	Apr 15, 2010	Jun 28, 2010	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward
GMSWORKS-35 BOAT RAMP DESIGN 6 MILE BAY	Schedule A.4.c	Apr 15, 2010	Jun 28, 2010	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward
GMSWORKS-36 BOAT RAMP DESIGN CUTTHUMB BAY	Schedule A.4.c	Apr 15, 2010	Jun 28, 2010	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward
GMSWORKS-37 BOAT RAMP DESIGN MACKENZIE LANDING	Schedule A.4.c	Apr 15, 2010	Jun 28, 2010	Aug 14, 2013	Aug 15, 2013
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-43 BOAT RAMP INGENIKA (Billy's Bay)	Schedule A.4.b	Apr 18, 2011	Apr 3, 2012 Deferred - TOR to be resubmitted		
GMSWORKS-44 BOAT RAMP FINLAY BAY	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
GMSWORKS-45 BOAT RAMP 6 MILE BAY	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
GMSWORKS-46 BOAT RAMP CUTTHUMB BAY	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
GMSWORKS-47 BOAT RAMP MACKENZIE LANDING	Schedule A.4.c	Apr 18, 2011	Apr 03, 2012	Nov 21, 2013	Nov 29, 2013
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-49 BOAT RAMP DUNLEVY	Schedule A.4.a	Apr 18, 2011	Apr 3, 2012 Deferred	Oct 18, 2013	Oct 25, 2013
GMSWORKS-51 BOAT RAMP HUDSONS HOPE (Dinosaur)	Schedule B.2	Apr 18, 2011	Apr 03, 2012	Oct 17, 2013	Jan 14, 2014
GMSWORKS-52 BOAT RAMP HALFWAY RIVER	Schedule C.2.b	Apr 18, 2011	Apr 03, 2012		
GMSWORKS-53 BOAT RAMP DESIGN HUDSONS HOPE (Dinosaur)	Schedule B.2	Apr 15, 2010	May 07, 2010	Oct 17, 2013	Jan 14, 2014
GMSWORKS-54 CAP BOAT RAMP DESIGN DUNLEVY	Schedule A.4.a	Apr 15, 2010	May 07, 2010	Jul 12, 2013	Jul 16, 2013
GMSWORKS-55 BLACKFOOT PARK MAINTENANCE	Schedule C.2.d	Apr 18, 2011	Apr 3, 2012 Deferred	Aug 19, 2013	Oct 10, 2013 Approval to cancel
GMSWORKS-56 HUDSONS HOPE MAINTENANCE (Dinosaur)	Schedule B.2	Apr 18, 2011	Apr 03, 2012		
GMSWORKS-57 DUNLEVY MAINTENANCE	Schedule A.4.a	Apr 18, 2011	Apr 3, 2012 Deferred	May 07, 2013	May 15, 2013
GMSWORKS-58 MACKENZIE MAINTENANCE	Schedule A.4.c	Apr 18, 2011	Apr 03, 2012		
GMSWORKS-59 INGENIKA MAINTENANCE (Billy's Bay)	Schedule A.4.b	Apr 18, 2011	Apr 3, 2012 Deferred TOR to be resubmitted		
GMSWORKS-60 FINLAY BAY MAINTENANCE	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
GMSWORKS-61 6 MILE BAY MAINTENANCE	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
GMSWORKS-62 CUTTHUMB BAY MAINTENANCE	Schedule A.4.c	Apr 18, 2011	Apr 3, 2012 CWR does not approve moving forward		
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 tables (Table 3-1 and Table 3-2) outline the current schedule for the physical works and monitoring programs being delivered for the Peace River WUP.

Table 3-1: Table of WUP Physical Works Schedule

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
GMSWORKS-1: PCR Aerial Photos	✓ ⁷	✓ ⁷	✓ ⁷	✓ ⁷					■ ⁸	■ ⁸				
GMSWORKS-2: PCR Baseline TGP/Temperature	✓	✓	✓	✓	✓	✓	u/w	■	■	■	■			
GMSWORKS-3: PCR Side Channels	Del	✓	✓		✓	✓	u/w							
GMSWORKS-4: PCR Hydraulic Habitat	Del	✓	✓	✓	✓									
GMSWORKS-5: PCR Hydraulic Model	Del	✓	✓	✓	✓ ³	✓ ³								
GMSWORKS-6: PCR Mainstem Stage Discharge	Del	✓	✓	✓	✓	✓ ⁵	u/w	■ ³						
GMSWORKS-7: PCR Riparian Habitat Assessment			✓	✓	✓									
GMSWORKS-8: DNR Demonstration Tributary			✓			✓	Del	■	■ ⁵					
GMSWORKS-9: DNR Tributary Inventory & Feasibility		✓												
GMSWORKS-10: PCR Industry & Taylor Water Quality Assessment	Del	✓	✓	✓	✓									
GMSWORKS-12: DNR Recreation Access	✓	✓	✓											
GMSWORKS-13: PCR Recreation Access	✓	✓	✓											
GMSWORKS-14: WLL Air Photos & DEM		✓	✓	✓							■			
GMSWORKS-16: WLL Wetland Inventory		✓	✓											
GMSWORKS-17: WLL Trial Wetlands			✓	✓	✓	✓	u/w	■ ⁵	■ ⁵	■ ⁵	■ ⁵			
GMSWORKS-18: WLL Debris Field Survey		✓	✓	✓										
GMSWORKS-19: WLL Trial Tributaries	Del	✓			✓	✓	u/w	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵		
GMSWORKS-20: WLL Dust Source Survey		✓	✓	✓	✓									
GMSWORKS-21: WLL Dust Control Trial	✓	✓	✓	✓										
GMSWORKS-22: WLL Debris Management		✓	✓	✓	✓	✓	u/w	■	■	■	■	■ ³		
GMSWORKS-23: WLL Erosion Control Trial	Del ¹	Del ¹	Del ¹	Del ¹	Del ¹									
GMSWORKS-24: WLL Boat Access	Del	✓	✓											
GMSWORKS-25: WLL Bathymetric Mapping			✓	✓	✓									
GMSWORKS-26: WLL Communications/Safety	Del	✓	Del	✓	✓	✓	u/w	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ^{5,9}
GMSWORKS-27: WLL Finlay River Access Information Plan		✓	✓											
GMSWORKS-28: Industry Feasibility & Design Study	Del	Del	✓ ²	✓ ²	✓	✓	u/w	■						
GMSWORKS-28a: District of Mackenzie Effluent Discharge Feasibility & Design Study			✓	✓	✓									
GMSWORKS-29: Lynx Creek Boat Launch Maintenance			✓	✓	✓	✓	u/w ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵		
GMSWORKS-30: Taylor Boat Launch Design			✓	✓	✓									
GMSWORKS-31: Kw adacha Boat Launch Maintenance			✓	✓	✓	✓	u/w ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵		
GMSWORKS-33: Boat Ramp Design Ingenika			✓	✓			Del							
GMSWORKS-34: Boat Ramp Design Finlay Bay			✓	✓										
GMSWORKS-35: Boat Ramp Design 6 Mile Bay			✓	✓										
GMSWORKS-36: Boat Ramp Design Cut Thumb bay			✓	✓										
GMSWORKS-37: Boat Ramp Design Mackenzie Landing			✓	✓	✓	✓								
GMSWORKS-38: Taylor Ramp Construction					✓	✓								
GMSWORKS-40: Boat Ramp Design Blackfoot Park			✓	✓	✓									
GMSWORKS-41: Boat Ramp Design Halfway River			✓	✓										
GMSWORKS-43: Boat Ramp Ingenika							Del							
GMSWORKS-47: Boat Ramp Mackenzie Landing							✓							
GMSWORKS-49: Boat Ramp Dunlevy							u/w	■						
GMSWORKS-51: Dinosaur Boat Ramp Construction (Hudson's Hope)					✓	✓								
GMSWORKS-52: Boat Ramp Halfway River						✓	u/w	■ ⁵						
GMSWORKS-53: Boat Ramp Design Hudson's Hope			✓	✓	✓									
GMSWORKS-54: Boat Ramp Design Dunlevy			✓	✓	✓	✓								
GMSWORKS-56: Hudson's Hope Maintenance						✓	✓	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	
GMSWORKS-57: Dunlevy Maintenance						✓	Del ⁹	Del ⁹	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵
GMSWORKS-58: Mackenzie Maintenance							Del ⁹	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	
GMSWORKS-59: Ingenika Maintenance														
GMSWORKS-63: Taylor Maintenance						✓ ⁵	u/w ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵	■ ⁵		
Legend	■ Program to be undertaken/initiated in identified year													
	u/w Project is under way													
	✓ Project is completed for the year													
	Del Project is delayed for the year													

Footnotes:

1. Delayed pending completion of outstanding commitments under contract between BC Hydro, the Province of BC, and the Tsay Keh Dene First Nation.
2. The industry portion of this project is delayed pending resolution of the status of the plants in Mackenzie. The community's sewage outfall portion is underway.
3. Final report completion only.
4. Final report completion.
5. Work in this year represents maintenance at existing sites.
6. Project wrap up costs, only (i.e. data archiving, report edits, etc.)
7. One of five flows captured in 2008, two additional flows captured in 2009, none in 2010, and the two remaining flows were captured in 2011.
8. Flows not captured in Year 9 will be taken in Year 10.
9. Maintenance work will continue in future years.
10. Project planning in 2013; construction planned for 2014.
11. Project planning will be initiated in 2013; construction planned for 2015.

Table 3-2: Table of WUP Monitoring Schedule

Monitoring Programs	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				Del ³	Del ⁷	Del ⁷								
GMSMON-2: PCR Fish Index	✓	✓	✓	✓	✓	✓	u/w	■	■	■	■ ²			
GMSMON-3: PCR Fish Stranding		✓	✓	✓	✓ ⁴	✓ ²								
GMSMON-4: WACB Entrainment	✓			✓	✓ ⁴	✓ ²								
GMSMON-5: PCR Productivity			Del ⁵	Del ⁵	Del ⁵	✓	u/w	■	■	■	■	■		
GMSMON-6: PCR Riparian Flooding										■	■			
GMSMON-7: PCR Side Channel Fisheries			Del ⁵	Del ⁵	Del ⁵	✓	u/w	■	■	■	■	■		■ ²
GMSMON-8: PCR Side Channel Response					✓ ⁴	✓ ²								
GMSMON-9: PCR Spill Hydrology		✓	✓	✓	✓	✓ ²								
GMSMON-10: PCR Spill Photos					✓ ⁴	✓								
GMSMON-11: PCR Spill TGP/Temperature					✓ ⁴	✓ ²								
GMSMON-12: PCR Wildlife Survey		✓	✓		✓ ⁴	✓ ²								
GMSMON-13: WLR Fish Index	✓	✓												
GMSMON-14: DNR Tributary Habitat			✓	Del ⁶	Del ⁵	Del ⁵	Del ⁵		■		■			
GMSMON-15: WLL Wetland Habitat			Del ⁶	✓	✓	✓	u/w	■	■	■	■	■	■	
GMSMON-16: WLL Debris Trends								■			■	■ ²		
GMSMON-17: WLL Tributary Habitat			Del ⁵	✓	✓	✓	u/w	■	■	■	■	■	■	
GMSMON-18: WLL Dust Control	✓	✓	✓	✓	✓	✓	u/w	■	■	■	■ ²			
GMSMON-19: WLL Erosion Control	Del ¹	Del ¹	Del ¹	Del ¹	Del ¹									
GMSMON-20: WLL Recreation Use		✓	✓	✓	✓	✓	u/w	■	■	■	■	■ ²		
GMSMON-21A: WLL Archaeological Overview Assessment		✓	✓											
GMSMON-21B: WLL Erosion Monitoring of Archaeological Resources		Del	✓	✓	✓	✓	u/w	■	■	■	■			
Legend	■ Program to be undertaken/initiated in identified year													
	u/w Project is under way													
	✓ Project is completed for the year													
	Del Project is delayed for the year													

Footnotes:

1. Delayed pending completion of outstanding commitments under contract between BC Hydro, the Province of BC, and the Tsay Keh Dene First Nation.
2. Final report completion only.
3. Delayed pending discussions with CWR re suitability of study to meet management objectives.
4. Opportunistic study to be implemented in the event of a spill meeting the criteria of the PSP.
5. Delayed one year due to delay of corresponding WORKS projects.
6. Delayed one year due to loss of resources.

Footnotes:

1. Delayed pending completion of outstanding commitments under contract between BC Hydro, the Province of BC, and the Tsay Keh Dene First Nation.
2. Final report completion only.
3. Delayed pending discussions with CWR re suitability of study to meet management objectives.
4. Opportunistic study to be implemented in the event of a spill meeting the criteria of the PSP.
5. Delayed one year due to delay of corresponding WORKS projects.
6. Delayed one year due to loss of resources.
7. Project cancelled.

4 Monitoring Programs and Physical Works Terms of Reference

The Monitoring Programs and Physical Works being implemented under the Peace River WUP are described in Terms of Reference. These Terms of Reference and the reports for work completed to date can be found here:

http://www.bchydro.com/about/sustainability/conservation/water_use_planning/north_ern_interior/peace_river.html

5 Summary of Physical Works Projects

5.1 GMSWORKS-1 – Peace River Aerial Photos

5.1.1 Status

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 will be undertaken in 2016.

5.2 GMSWORKS-2 – Peace River Baseline TGP and Temperature

5.2.1 Status

Monitoring equipment was purchased in August 2008 and the temperature gauges deployed the following month. Temperature readings are downloaded quarterly. The project will continue until 2019. Attached are the reports for Year 4 (2012), dated June 30, 2013 and Year 5 (2013), dated May 16, 2014.

5.3 GMSWORKS-3 – Peace River Side Channels

5.3.1 Status

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 2 trial sites, Site 102.5R, was completed in spring 2014. The second trial site, 32L, is under review. The completion report for 102.5R will be submitted with the 2015 Annual Report.

5.4 GMSWORKS-4 – Peace River Hydraulic Habitat

5.4.1 Status

This project is complete.

5.5 GMSWORKS-5 – Peace River Hydraulic Model

5.5.1 Status

This project is complete.

5.6 GMSWORKS-6 – Peace River Mainstem Stage Discharge

5.6.1 Status

This work was initiated in May 2009 and is scheduled to be completed by January 2015.

5.7 GMSWORKS-7 – Peace River Riparian Habitat Assessment

5.7.1 Status

This project is complete.

5.8 GMSWORKS-8 – Dinosaur Reservoir Demonstration Tributary

5.8.1 Status

This project has been delayed to allow for additional discussions to ensure the proposed approach, as recommended by the GMSWORKS-9 study, is acceptable. Further feasibility assessments and recommendations are expected in 2015.

5.9 GMSWORKS-9 – Dinosaur Reservoir Tributary Inventory and Feasibility

5.9.1 Status

This project is complete.

5.10 GMSWORKS-10 – Peace River Industry and Taylor Water Quality Assessment

5.10.1 Status

This work was initiated in May 2009 and was completed by December 2012. Based on the results of Years 1 and 2, a limited additional work program was recommended for Year 3. A decision was made to follow the recommendations of the consultant and complete this project in Year 3, rather than continue with Years 4 and 5 as planned in the original program. This project is complete.

5.11 GMSWORKS-12 – Peace and Williston Recreational Access (Feasibility of Boat Ramps)

5.11.1 Status

This project is complete.

5.12 GMSWORKS-13 – Peace River Recreational Access

5.12.1 Status

This project is complete.

5.13 GMSWORKS-14 – Williston Air Photos and DEM

5.13.1 Status

The first stage of work was initiated in April 2009 and completed in December 2010. The second set of air photos was scheduled to be acquired in 2013, but those photos

were taken in spring of 2011 to take advantage of the very low reservoir level, thus assisting several Peace projects including dust mitigation, wetlands and tributaries, and bathymetry. Advancing those photos did not negatively affect the project budget. The third set of photos is scheduled to be acquired in 2018.

5.14 GMSWORKS-16 – Williston Wetland Inventory

5.14.1 Status

This project is complete.

5.15 GMSWORKS-17 – Williston Trial Wetlands

5.15.1 Status

Construction of one of two trial sites, Airport Lagoon, was completed in 2013. Construction of the second trial site, Beaver Pond, is underway. A completion report for Airport Lagoon, dated November 4, 2013, is attached. Construction of the Beaver Pond site was completed in June 2014 and a completion report will be submitted with the 2015 Annual Report.

5.16 GMSWORKS-18 – Williston Debris Field Survey

5.16.1 Status

The project, which commenced in 2009, consists of two components – a debris field survey and a debris management strategy. The debris field survey was completed in June 2010. The second component, the Williston Reservoir Debris Management Strategy is expected to be complete this year. A debris strategy report completed in April 2011 was deficient in providing a strategy but instead identified options to be considered in a debris management strategy and made recommendations on what to include in a strategy. BC Hydro received approval from the Comptroller on February 17, 2014 to complete this remaining work. We expect the current contractor to complete the strategy by the end of July 2014.

5.17 GMSWORKS-19 – Williston Reservoir Trial Tributaries

5.17.1 Status

Project planning commenced in 2013, and construction works for Ole Creek and Six Mile Creek commenced in spring 2014. A project completion report will be submitted with the 2015 Annual Report.

5.18 GMSWORKS-20 – Williston Dust Mapping

5.18.1 Status

This work was initiated in May 2009. The final season of field data was collected in 2012. The dust soil mapping work was incorporated into a Lagrangian Particle Dispersion model to demonstrate that dust generation around the Finlay Arm could be modelled. The level of detail on weather and wind needs improvement and further development of the model is being considered using a combination of wind forecasting tools provided by UBC and soil characteristics and particle distribution

behaviour on the beaches provided by Nickling Environmental. Attached are the reports for Year 3 dated July 18, 2012, and Year 4 dated August 22, 2013.

5.19 GMSWORKS-21 – Williston Dust Control Trials

5.19.1 Status

With the exception of 2013, vegetation trials are ongoing annually. The 2012 report will be submitted with the 2015 Annual Report.

An Engineered Roughness trial using local woody debris was initiated in March 2014. The debris placement was completed in April before the snow and ice were off the beach area. Monitoring of the effectiveness of the engineered roughness will continue until the reservoir exceeds elevation 669 m. A feasibility and effectiveness report will be submitted with the 2015 Annual Report.

An Irrigation trial using a high volume pump and four sprinklers to cover the beach area was implemented in May 2014. Monitoring of the effectiveness of the irrigation will continue until the reservoir exceeds elevation 669 m. A feasibility and effectiveness report will be submitted with the 2015 Annual Report.

5.20 GMSWORKS-22 – Williston Targeted Debris Management

5.20.1 Status

Work was initiated in May 2009 and is scheduled to be completed by January 2019. Attached are the Year 4 report, dated November 23, 2012 and Year 5 report dated November 26, 2013.

5.21 GMSWORKS-23 – Williston Erosion Control Trial

5.21.1 Status

This project will investigate the feasibility of erosion controls at the Tsay Keh village site and implement any chosen solution on a trial basis. The project has not been designed or awarded.

The submission of ToR for this project is on hold pending creation of a Reserve for the Tsay Keh Dene First Nation (TKD) pursuant to an agreement between BC Hydro, the TKD, and the Province of British Columbia.

5.22 GMSWORKS-24 – Finlay Reach Access

5.22.1 Status

This project is complete.

5.23 GMSWORKS-25 – Williston Reservoir Bathymetry

5.23.1 Status

This work was initiated in April 2010 and completed in 2013. Twenty-five navigational charts of the reservoir were created. The final report, dated December 31, 2013, is attached.

5.24 GMSWORKS-26 – Williston Communication and Safety

5.24.1 Status

This work was initiated in January 2009. Installation and commissioning of the radio communications network for Williston reservoir was completed in September 2013. Installation of signs at boat ramp facilities commenced in the spring of 2013 and will proceed according to the construction schedules for each facility. Monitoring of the communication was provided from May to November in 2013 and 2014. The radio strength survey of the Peace Arm and Dinosaur Reservoir planned for fall 2013 was delayed.

5.25 GMSWORKS-27 – Finlay River Access Information Plan

5.25.1 Status

This project is complete.

5.26 GMSWORKS-28 – Industry Feasibility & Design Study

5.26.1 Status

The components of this project relating to Mackenzie industry resumed in early 2012. Phase Two of the study was completed in November 2013. The report is currently under review.

5.27 GMSWORKS-28A – District of Mackenzie Effluent Discharge Feasibility & Design Study

5.27.1 Status

Contractor's report has been submitted and will be combined with the Industry Feasibility & Design Study when that report is complete.

5.28 GMSWORKS-29 – Lynx Creek Boat Ramp

5.28.1 Status

This project to upgrade the boat ramp has not yet begun. A site visit was carried out in May 2011 by a BC Hydro representative and an engineering consultant from Moffatt & Nichol. At that time structural maintenance was not deemed necessary as the ramp, road and breakwater appear to be in good working condition. Non-structural routine maintenance is underway annually or as necessary.

5.29 GMSWORKS-30 – Peace Island Park Boat Ramp

5.29.1 Status

Due to ongoing erosion problems and difficulties faced by users due to infrastructure failure, it was determined in 2011 that a new launch facility was required at the site. A construction project was initiated in 2012 (GMSWORKS-38), Taylor Boat Ramp, and was completed in the spring of 2013.

5.30 GMSWORKS-31 – Kwadacha Boat Ramp

5.30.1 Status

A maintenance contract is in place.

5.31 GMSWORKS-33 – Boat Ramp Design Ingenika

5.31.1 Status

Location, design and delivery date of Ingenika boat ramp being determined through ongoing conversations with local First Nations, Tsay Keh Dene, in particular.

5.32 GMSWORKS-34 – Boat Ramp Design Finlay Bay

5.32.1 Status

The project has been deferred until recreational demand warrants upgrade work at this facility.

5.33 GMSWORKS-35 – Boat Ramp Design 6 Mile Bay

5.33.1 Status

The project has been deferred until recreational demand warrants upgrade work at this facility.

5.34 GMSWORKS-36 – Boat Ramp Design Cut Thumb Bay

5.34.1 Status

The project has been deferred until recreational demand warrants upgrade work at this facility.

5.35 GMSWORKS-37 – Boat Ramp Design Mackenzie Landing

5.35.1 Status

This project is complete.

5.36 GMSWORKS-38 – Taylor Boat Ramp Construction

5.36.1 Status

Construction work to build a new ramp at Peace Island Park commenced in the fall of 2012, and was completed in the spring of 2013. Design work was completed under GMSWORKS-30.

5.37 GMSWORKS-40 – Boat Ramp Design Blackfoot Park

5.37.1 Status

Relief from completion of the project was granted to BC Hydro from the Comptroller of Water Rights due to constructability and flooding concerns.

5.38 GMSWORKS-41 – Boat Ramp Design Halfway River

5.38.1 Status

Designs have been submitted to Comptroller of Water Rights for review.

A recommendation was made, based on consent with local stakeholders, to delay construction of a new boat launch at Halfway River pending a decision on Site C as this site would be inundated if Site C were to proceed. Maintenance of the site will continue.

5.39 GMSWORKS-43 Boat Ramp Ingenika

5.39.1 Status

This physical works has not yet been initiated. Location, design and delivery date of Ingenika boat ramp are being determined through ongoing conversations with local First Nations, Tsay Keh Dene, in particular.

5.40 GMSWORKS-47 Boat Ramp Mackenzie Landing

5.40.1 Status

This physical works was initiated in 2012. Construction of a new boat ramp is complete. Attached is the Mackenzie Boat Ramp Project completion report, dated June 13, 2014.

5.41 GMSWORKS-49 Boat Ramp Dunlevy

5.41.1 Status

This physical works was initiated in 2010. Upland work and some construction for the new boat ramp commenced in spring 2014. The new boat ramp will be constructed in spring 2015. Anticipated completion is summer 2015.

5.42 GMSWORKS-51 – Dinosaur Boat Ramp Construction (Hudson's Hope)

5.42.1 Status

Construction work to build a new ramp, breakwater and floating dock commenced in the fall of 2012, and was completed in the spring of 2013. Design work for this boat ramp and dock, was completed under GMSWORKS-53. This project is now complete.

5.43 GMSWORKS-52 Boat Ramp Halfway River

5.43.1 Status

Designs have been submitted to Comptroller of Water Rights for review under GMSWORKS-41.

A recommendation was made to delay approval of a new boat launch at Halfway River until the next stage in the Site C approval process as this site would be inundated if Site C were to proceed. Maintenance of the site will continue. There was unanimous consent with local stakeholders to hold off any construction until a final decision on Site C is made.

5.44 GMSWORKS-53 – Boat Ramp Design Hudson’s Hope

5.44.1 Status

Designs were submitted to Comptroller of Water Rights for review in 2010 and again in 2012 after revision. Construction work at this facility was completed under project GMSWORKS-51.

5.45 GMSWORKS-54 – Boat Ramp Design Dunlevy

5.45.1 Status

Dunlevy boat ramp design is complete. Attached is the feasibility report for Boat Ramp Design Dunlevy dated June 28, 2013.

5.46 GMSWORKS-56 Hudson's Hope Maintenance

5.46.1 Status

This physical works to maintain the new boat ramp constructed under GMSWORKS-51 was initiated in 2013 and will be carried out over seven years.

5.47 GMSWORKS-57 Dunlevy Maintenance

5.47.1 Status

This physical works was initiated in 2013 on the existing boat ramp. Once the new ramp is complete in 2015, maintenance will then be carried out starting in 2016 for an additional six years. Due to the delay in ramp construction, the TOR for the maintenance of the new ramp will now be submitted by December 30, 2015.

5.48 GMSWORKS-58 Mackenzie Maintenance

5.48.1 Status

The Mackenzie boat ramp was completed in spring 2014. The maintenance will be initiated in 2015 on the new ramp and will be carried out for six years.

5.49 GMSWORKS-59 Ingenika Maintenance

5.49.1 Status

This project will be implemented upon completion of the Ingenika boat ramp.

5.50 GMSWORKS-63 Taylor Maintenance

5.50.1 Status

This physical works to maintain the new boat ramp constructed under GMSWORKS-38 was initiated in 2013, and will be carried out over seven years.

6 Summary of Monitoring Programs

6.1 GMSMON-1 – Peace River Creel Survey

6.1.1 Status

On November 23, 2011, the CWR approved a request to cancel GMSMON-1 due to the scope, schedule and budget of this WUP monitoring project being insufficient to meet the ToR objectives.

6.2 GMSMON-2 – Peace River Fish Index

6.2.1 Status

Field work was successfully completed in 2013 and the annual report received in March 2014. Attached is the Year 6 report, dated March 31, 2014.

6.3 GMSMON-3 – Peace River Fish Stranding

6.3.1 Status

This is an opportunistic study to be implemented in the event of a spill. Pre-spill work was completed in 2010. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012. Attached is the Year 1 report, dated March 2013. This opportunistic study remains active for the duration of the WUP in the event of a future trigger of the Peace Spill Protocol.

6.4 GMSMON-4 – WAC Bennett Dam Entrainment

6.4.1 Status

This is an opportunistic study to be implemented in the event of a spill. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012. The scope of the work was divided into two areas: fish indexing and hydro acoustic monitoring, with the respective report being submitted in 2013. This opportunistic study remains active for the duration of the WUP in the event of a future trigger of the Peace Spill Protocol.

6.5 GMSMON-5 – Peace River Productivity

6.5.1 Status

The PCR Productivity monitoring program will assess the effectiveness of the PCR Side Channels and the PCR Ramping Plans, and address a data gap in the ecological knowledge of periphyton and invertebrate communities in Peace River side channel habitat.

This project commenced in the spring of 2013 to provide baseline data for Site 102.5R in advance of GMSWORKS-3. Construction of Site 102.5R was completed in April 2014. Attached is the Year 1 report (2013), dated January 2014.

6.6 GMSMON-6 – Peace River Riparian Flooding

6.6.1 Status

This is an opportunistic study to be implemented in 2017 and 2018 in the event of a spill release prior to 2017. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012.

6.7 GMSMON-7 – Peace River Side Channel Fisheries

6.7.1 Status

This PCR Side Channel Fisheries program will monitor side channels enhanced through physical works to assess their effectiveness at improving fish habitat.

This project commenced in the spring of 2013 to provide baseline data for Site 102.5R in advance of GMSWORKS-3. Construction of Site 102.5R was completed in April 2014. Attached is the Year 1 report dated January 20, 2014.

6.8 GMSMON-8 – Peace River Side Channel Response

6.8.1 Status

Opportunistic study, to be implemented in the event of a spill. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012. The sites monitored were based on the site selection process imbedded in GMSWORKS-3. The 2012 report dated April 13, 2013 is attached.

6.9 GMSMON-9 – Peace River Spill Hydrology

6.9.1 Status

Opportunistic PSP study with a pre-spill research component that commenced in June 2009. A pre-spill report dated March 7, 2012 covering conditions in Year 4 of the WUP (2011) was completed. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012. The report covering the 2012 spill, dated May 15, 2014, is attached.

6.10 GMSMON-10 – Peace River Spill Photos

6.10.1 Status

Opportunistic study to be implemented in the event of a spill. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012 and the associated report was submitted. This opportunistic study remains active for the duration of the WUP in the event of a future trigger of the Peace Spill Protocol.

6.11 GMSMON-11 – Peace River Spill TGP and Temperature

6.11.1 Status

Opportunistic study to be implemented in the event of a spill. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012. The report covering the 2012 spill, dated April 1, 2014, is

attached. This opportunistic study remains active for the duration of the WUP in the event of a future trigger of the Peace Spill Protocol.

6.12 GMSMON-12 – Peace River Wildlife Stranding Survey

6.12.1 Status

Opportunistic PSP study with a pre-spill research component that commenced in May 2010. A spill event meeting the minimum discharge and duration requirements to trigger this study occurred in the summer of 2012 and a report was submitted. This opportunistic study remains active for the duration of the WUP in the event of a future trigger of the Peace Spill Protocol.

6.13 GMSMON-13 – WLL Fish Index

6.13.1 Status

This project is complete.

6.14 GMSMON-14 – Dinosaur Reservoir Tributary Habitat

6.14.1 Status

This monitoring project for the DNR Demonstration Tributary (GMSWORKS-8) commenced in June 2010, but has since been delayed to allow for additional discussions to ensure the proposed approach for the demonstration tributary, as recommended by the GMSWORKS-9 study, is acceptable.

6.15 GMSMON-15 – Williston Wetland Habitat

6.15.1 Status

Work began in April 2011 and is to be completed by February 2021. Attached is the Year 3 report, dated March 2014. Construction of two trial sites under GMSWORKS-17 is complete. Airport Lagoon, was completed in 2013 and Beaver Pond, June 2014. Subsequent reports will monitor post-enhancement conditions.

6.16 GMSMON-16 – Williston Debris Trends

6.16.1 Status

The scope and schedule of this project is currently under review due to the delay in finalizing and implementing the debris management strategy (GMSWORKS-18). BC Hydro plans consultation with agencies and First Nations on proposed revisions prior to seeking approval to ToR revisions.

6.17 GMSMON-17 – Tributary Habitat Review

6.17.1 Status

This work began in April 2011 and is to be completed by February 2021. Attached is Year 3 report dated January 30, 2014, which covers a third year of pre-enhancement conditions. Enhancement work under GMSWORKS-19 for Ole Creek and Six Mile Creek commenced in spring 2014 and were completed in June 2014.

6.18 GMSMON-18 – Williston Dust Control

6.18.1 Status

This work was initiated in April 2008 and is scheduled to be completed by March 2017. Attached is the Year 5 report, dated December 11, 2013. The 2013 report is in progress and will be submitted with the 2015 Annual Report.

6.19 GMSMON-19 – Williston Erosion Control

6.19.1 Status

The submission of ToR for this project is on hold pending creation of a Reserve for the Tsay Keh Dene First Nation (TKD) pursuant to an agreement between BC Hydro, the TKD, and the Province of British Columbia.

6.20 GMSMON-20 – Reservoir Recreation Use

6.20.1 Status

This work was initiated in May 2009 and is scheduled to be completed by February 2019. Attached is the Year 5 report, dated February 15, 2014.

6.21 GMSMON-21A – Heritage and Culture Information Plan: Archaeological Overview Assessment

6.21.1 Status

This project is complete.

6.22 GMSMON-21B – Peace River Erosion Monitoring – Archaeological Resources

6.22.1 Status

This monitoring project commenced in the spring of 2010 and will continue annually. Monitoring reports are in progress.

7 Peace WUP Project Costs

Table 7-1 summarizes the financial status of all Peace WUP projects as of May 31, 2014.

Table 7-1: Peace Project 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
Peace River WUP Annual Report	\$8,198	\$11,210	\$6,367	\$17,578	(\$9,380)	Forecasting overspend due to 2010 resubmission cost reduction forecast not being realized.	Resubmission for Annual Report Costs by December 30, 2014
GMSM01A PCR Creel Survey	\$0	\$9,938	\$0	\$9,938	(\$9,938)	Project cancelled.	
GMSM01A PCR Creel Survey - OR DM	\$0	\$9,938	\$0	\$9,938	(\$9,938)		
GMSM01A PCR Creel Survey - OR Imp	\$0		\$0	\$0	(\$0)		
GMSM02A PCR Fish Index	\$2,285,174	\$1,262,946	\$1,022,228	\$2,285,174	\$0		
GMSM02A PCR Fish Index - OR DM	\$112,133	\$53,311	\$6,988	\$60,299	\$51,834		
GMSM02A PCR Fish Index - OR Imp	\$2,173,041	\$1,209,634	\$1,015,241	\$2,224,875	(\$51,834)		
GMSM03A PCR Fish Stranding	\$225,156	\$142,700	\$80,016	\$222,717	\$2,439		
GMSM03A PCR Fish Stranding - OR DM	\$12,272	\$12,097	\$1,850	\$13,947	(\$1,675)		
GMSM03A PCR Fish Stranding - OR Imp	\$212,884	\$130,604	\$78,166	\$208,770	\$4,114		
GMSM04A GMS Entrainment	\$468,168	\$260,693	\$207,475	\$468,168	\$0		
GMSM04A GMS Entrainment - OR DM	\$45,505	\$31,404	\$14,101	\$45,505			
GMSM04A GMS Entrainment - OR Imp	\$422,663	\$229,289	\$193,374	\$422,663			
GMSM05A PCR Productivity	\$1,133,979	\$117,882	\$919,241	\$1,037,123	\$0		
GMSM05A PCR Productivity - OR DM	\$129,576	\$27,434	\$102,142	\$129,576			
GMSM05A PCR Productivity - OR Imp	\$1,004,403	\$90,448	\$913,955	\$1,004,403			
GMSM06A PCR Riparian Flooding	\$226,273	\$3,128	\$198,060	\$201,188	\$25,085		
GMSM06A PCR Riparian Flooding - OR DM	\$31,213	\$3,128	\$3,000	\$6,128	\$25,085		
GMSM06A PCR Riparian Flooding - OR Imp	\$195,060		\$195,060	\$195,060	\$0		
GMSM07A PCR Side Channel Fish	\$841,652	\$170,543	\$671,109	\$841,652	\$0		
GMSM07A PCR Side Channel Fish - OR DM	\$148,761	\$31,127	\$117,634	\$148,761			
GMSM07A PCR Side Channel Fish - OR Imp	\$692,891	\$139,416	\$553,475	\$692,891			
GMSM08A PCR Side Channel Resp	\$138,752	\$56,652	\$82,100	\$138,752	\$0		
GMSM08A PCR Side Channel Resp - OR DM	\$9,652	\$6,652	\$3,000	\$9,652			
GMSM08A PCR Side Channel Resp - OR Imp	\$129,100	\$50,000	\$79,100	\$129,100			
GMSM09A PCR Spill Hydrology	\$68,979	\$47,077	\$1,000	\$48,077	\$20,902	Project Completed	
GMSM09A PCR Spill Hydrology - OR DM	\$18,979	\$20,389	\$0	\$20,390	(\$1,411)		
GMSM09A PCR Spill Hydrology - OR Imp	\$50,000	\$26,687	\$1,000	\$27,687	\$22,313		
GMSM10A PCR Spill Photos	\$297,996	\$123,969	\$121,803	\$245,771	\$52,225		
GMSM10A PCR Spill Photos - OR DM	\$10,951	\$11,171	\$2,103	\$13,274	(\$2,323)		
GMSM10A PCR Spill Photos - OR Imp	\$287,045	\$112,798	\$119,700	\$232,498	\$54,547		
GMSM11A PCR Spill TGP/Temp	\$77,856	\$36,663	\$26,529	\$63,192	\$14,664		
GMSM11A PCR Spill TGP/Temp - OR DM	\$15,371	\$12,517	\$3,029	\$15,547	(\$176)		
GMSM11A PCR Spill TGP/Temp - OR Imp	\$62,485	\$24,145	\$23,500	\$47,645	\$14,840		
GMSM12A PCR Wildlife Survey	\$339,669	\$140,487	\$190,655	\$331,142	\$8,527		
GMSM12A PCR Wildlife Survey - OR DM	\$18,231	\$16,649	\$2,935	\$19,584	(\$1,353)		
GMSM12A PCR Wildlife Survey - OR Imp	\$321,438	\$123,838	\$187,720	\$311,558	\$9,880		
GMSM13A WLL Fish Index	\$124,909	\$74,302	\$0	\$74,302	\$50,607	Project completed	
GMSM13A WLL Fish Index - OR DM	\$14,296	\$12,796	\$0	\$12,796	\$1,500		
GMSM13A WLL Fish Index - OR Imp	\$110,613	\$61,506	\$0	\$61,506	\$49,107		
GMSM14A DNR Tributary Habita	\$150,364	\$31,497	\$98,302	\$129,800	\$0		
GMSM14A DNR Tributary Habita - OR DM	\$57,080	\$13,988	\$43,092	\$57,080			
GMSM14A DNR Tributary Habita - OR Imp	\$93,284	\$17,509	\$75,775	\$93,284			
GMSM15A WLL Wetland Habitat	\$981,420	\$287,853	\$584,167	\$872,020	\$0		
GMSM15A WLL Wetland Habitat - OR DM	\$157,922	\$35,476	\$122,446	\$157,922			
GMSM15A WLL Wetland Habitat - OR Imp	\$823,498	\$252,377	\$571,121	\$823,498			
GMSM16A WLL Debris Trends	\$215,564	\$4,233	\$125,313	\$129,546	\$86,018		
GMSM16A WLL Debris Trends - OR DM	\$46,860	\$4,233	\$12,313	\$16,546	\$30,314		
GMSM16A WLL Debris Trends - OR Imp	\$168,704		\$113,000	\$113,000	\$55,704		
GMSM17A WLL Tributary Habita	\$1,467,158	\$476,701	\$990,457	\$1,467,158	\$0		
GMSM17A WLL Tributary Habita - OR DM	\$133,598	\$43,855	\$89,743	\$133,598			
GMSM17A WLL Tributary Habita - OR Imp	\$1,333,560	\$432,846	\$900,714	\$1,333,560			
GMSM18A WLL Dust Control	\$4,784,865	\$2,974,036	\$2,602,718	\$5,576,754	(\$791,889)	change in scope and contractor	Resubmission sent to CWR on April 9, 2014
GMSM18A WLL Dust Control - OR DM	\$184,905	\$60,386	\$87,222	\$147,607	\$37,298		
GMSM18A WLL Dust Control - OR Imp	\$4,599,960	\$2,913,650	\$2,515,496	\$5,429,147	(\$829,187)		
GMSM19A WLL Erosion Control	\$0	\$2,852	\$0	\$2,852	(\$2,852)	Project not yet approved	
GMSM19A WLL Erosion Control - OR DM	\$0	\$2,852	\$0	\$2,852	(\$2,852)		
GMSM19A WLL Erosion Control - OR Imp	\$0		\$0	\$0	(\$0)		
GMSM20A WLL Recreation Use	\$268,906	\$136,011	\$184,808	\$320,820	(\$51,914)	Rising fuel prices and unanticipated larger volume of data to process are resulting in a forecast to overspend	Review costs of 2015 implementation with budget. ToR resubmission by January 30, 2016
GMSM20A WLL Recreation Use - OR DM	\$115,060	\$30,046	\$10,325	\$40,371	\$74,689		
GMSM20A WLL Recreation Use - OR Imp	\$153,846	\$105,965	\$174,484	\$280,449	(\$126,603)		
GMSM21A WLL Arch Overview	\$113,614	\$111,608	\$0	\$111,608	\$2,006	Project completed	
GMSM21A WLL Arch Overview - OR DM	\$16,186	\$18,388	\$0	\$18,388	(\$2,202)		
GMSM21A WLL Arch Overview - OR Imp	\$97,428	\$93,220	\$0	\$93,220	\$4,208		
GMSM21B WLL Arch Monitor	\$705,659	\$201,409	\$504,250	\$705,659	\$0		
GMSM21B WLL Arch Monitor - OR DM	\$119,954	\$18,463	\$101,492	\$119,954			
GMSM21B WLL Arch Monitor - OR Imp	\$585,705	\$182,946	\$402,759	\$585,705			
GMSW01A PCR Aerial Photos	\$709,995	\$230,929	\$479,066	\$709,995	\$0		
GMSW01A PCR Aerial Photos - OR DM	\$15,318	\$9,392	\$5,926	\$15,318			
GMSW01A PCR Aerial Photos - OR Imp	\$694,677	\$221,537	\$473,140	\$694,677			
GMSW02A Baseline TGP Temp	\$254,554	\$124,564	\$108,839	\$233,403	\$21,151		
GMSW02A Baseline TGP Temp - OR DM	\$77,340	\$19,657	\$10,412	\$30,068	\$47,272		
GMSW02A Baseline TGP Temp - OR Imp	\$177,214	\$104,907	\$98,428	\$203,335	(\$26,121)		
GMSW03A PCR Trial Side Chan	\$2,477,678	\$854,621	\$1,623,057	\$2,477,678	\$0		
GMSW03A PCR Trial Side Chan - OR DM	\$48,977	\$36,354	\$12,623	\$48,977			
GMSW03A PCR Trial Side Chan - OR Imp	\$2,428,701	\$818,267	\$1,610,434	\$2,428,701			
GMSW04A PCR Hydraulic Habit OR	\$134,816	\$134,815	\$0	\$134,815	\$0	Project complete.	
GMSW04A PCR Hydraulic Habit - OR DM	\$17,728	\$17,728	\$0	\$17,728	\$0		
GMSW04A PCR Hydraulic Habit - OR Imp	\$117,088	\$117,088	\$0	\$117,088	\$0		
GMSW04A PCR Hydraulic Habit - ONR		\$27,464		\$27,464	(\$27,464)	Additional reporting costs beyond the GMSW04 CWR approved budget	
GMSW04A PCR Hydraulic Habit - ONR DM OS		\$3,690		\$3,690	(\$3,690)		
GMSW04A PCR Hydraulic Habit - ONR Imp OS		\$23,774		\$23,774	(\$23,774)		
GMSW05A PCR Hydraulic Model	\$270,648	\$208,246	\$0	\$208,246	\$62,402		
GMSW05A PCR Hydraulic Model - OR DM	\$31,742	\$28,581	\$0	\$28,581	\$3,161		
GMSW05A PCR Hydraulic Model - OR Imp	\$238,906	\$179,665	\$0	\$179,665	\$59,241		
GMSW06A PCR Mainstem Stage	\$306,437	\$265,614	\$40,823	\$306,437	\$0		
GMSW06A PCR Mainstem Stage - OR DM	\$39,515	\$31,957	\$2,028	\$33,985	\$5,530		
GMSW06A PCR Mainstem Stage - OR Imp	\$266,922	\$233,658	\$38,795	\$272,453	(\$5,531)		

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
GMSW07A PCR Riparian Habit	\$181,857	\$150,696	\$0	\$150,696	\$31,161	Project complete.	
GMSW07A PCR Riparian Habit - OR DM	\$22,854	\$28,928	\$0	\$28,928	(\$6,074)		
GMSW07A PCR Riparian Habit - OR Imp	\$159,003	\$121,768	\$0	\$121,768	\$37,235		
GMSW08A DNR Demonstration	\$247,265	\$14,835	\$232,430	\$247,265	\$0		
GMSW08A DNR Demonstration - OR DM	\$63,222	\$6,827	\$56,395	\$63,222			
GMSW08A DNR Demonstration - OR Imp	\$184,043	\$8,008	\$176,035	\$184,043			
GMSW09A DNR Tributary Inven	\$41,013	\$32,016	\$0	\$32,016	\$8,997	Project completed.	
GMSW09A DNR Tributary Inven - OR DM	\$16,013	\$8,890	\$0	\$8,890	\$7,123		
GMSW09A DNR Tributary Inven - OR Imp	\$25,000	\$23,125	\$0	\$23,125	\$1,875		
GMSW10A PCR Industry & Tay	\$220,253	\$159,484	\$0	\$159,484	\$60,769	Project completed.	
GMSW10A PCR Industry & Tay - OR DM	\$69,761	\$26,652	\$0	\$26,652	\$43,109		
GMSW10A PCR Industry & Tay - OR Imp	\$150,492	\$132,832	\$0	\$132,832	\$17,660		
GMSW11A FSJ Water Supply	\$0	(\$352)	\$0	-\$352	\$352	Project cancelled.	
GMSW11A FSJ Water Supply - OR DM	\$0	(\$352)	\$0	(\$352)	\$352		
GMSW11A FSJ Water Supply - OR Imp	\$0		\$0	\$0	(\$0)		
GMSW12A DNR Recreation Acc	\$118,729	\$71,586	\$0	\$71,586	\$47,143	Project completed.	
GMSW12A DNR Recreation Acc - OR DM	\$60,765	\$15,400	\$0	\$15,400	\$45,365		
GMSW12A DNR Recreation Acc - OR Imp	\$57,964	\$56,186	\$0	\$56,186	\$1,778		
GMSW13A PCR Recreation Acc	\$326,409	\$130,138	\$0	\$130,138	\$196,271	Project completed.	
GMSW13A PCR Recreation Acc - OR DM	\$96,825	\$15,624	\$0	\$15,624	\$81,201		
GMSW13A PCR Recreation Acc - OR Imp	\$229,584	\$114,514	\$0	\$114,514	\$115,070		
GMSW14A WLL Air Photos & Dem	\$2,804,180	\$1,738,885	\$1,065,295	\$2,804,180	\$0		
GMSW14A WLL Air Photos & Dem - OR DM	\$30,295	\$26,325	\$8,355	\$34,680	(\$4,385)		
GMSW14A WLL Air Photos & Dem - OR Imp	\$2,773,885	\$1,712,560	\$1,056,940	\$2,769,500	\$4,385		
GMSW16A WLL Wetland Invent - OR	\$143,076	\$143,076	\$0	\$143,076	\$0		Project completed.
GMSW16A WLL Wetland Invent - OR DM	\$12,656	\$12,656	\$0	\$12,656	\$0		
GMSW16A WLL Wetland Invent - OR Imp	\$130,420	\$130,420	\$0	\$130,420	\$0		
GMSW16A WLL Wetland Invent - ONR		\$5,375		\$5,375	(\$5,375)	Additional reporting costs beyond the GMSW16A CWR approved budget	Project completed.
GMSW16A WLL Wetland Invent - ONR DM OS		\$2,300		\$2,300	(\$2,300)		
GMSW16A WLL Wetland Invent - ONR Imp OS		\$3,075		\$3,075	(\$3,075)		
GMSW17A WLL Trial Wetlands	\$2,323,692	\$811,909	\$1,511,783	\$2,323,692	\$0		
GMSW17A WLL Trial Wetlands - OR DM	\$30,273	\$25,709	\$4,564	\$30,273			
GMSW17A WLL Trial Wetlands - OR Imp	\$2,293,419	\$786,200	\$1,507,219	\$2,293,419			
GMSW18A WLL Debris Field	\$342,368	\$329,145	\$10,000	\$339,145	\$3,223		
GMSW18A WLL Debris Field - OR DM	\$20,735	\$16,011	\$0	\$16,011	\$4,724		
GMSW18A WLL Debris Field - OR Imp	\$321,633	\$313,134	\$10,000	\$323,134	(\$1,501)		
GMSW19A WLL Trial Tributary	\$2,552,026	\$413,716	\$2,138,310	\$2,552,026	\$0		
GMSW19A WLL Trial Tributary - OR DM	\$40,649	\$35,826	\$4,823	\$40,649			
GMSW19A WLL Trial Tributary - OR Imp	\$2,511,377	\$377,890	\$2,133,487	\$2,511,377			
GMSW20A Dust Source Survey	\$733,672	\$714,406	\$0	\$714,406	\$19,266		
GMSW20A Dust Source Survey - OR DM	\$35,587	\$37,537	\$0	\$37,537	(\$1,950)		
GMSW20A Dust Source Survey - OR Imp	\$698,085	\$676,869		\$676,869	\$21,216		
GMSW21A WLL Dust Ctr Trial	\$3,361,598	\$2,907,044	\$109,730	\$3,016,774	\$344,824		
GMSW21A WLL Dust Ctr Trial - OR DM	\$140,246	\$113,970	\$0	\$113,970	\$26,276		
GMSW21A WLL Dust Ctr Trial - OR Imp	\$3,221,352	\$2,793,073	\$109,730	\$2,902,804	\$318,548		
GMSW22A WLL Debris Removal - ONR	\$5,470,099	\$2,093,241	\$3,135,917	\$5,229,158	\$240,941		
GMSW22A WLL Debris Removal - ONR DM	\$75,919	\$67,011	\$35,917	\$102,928	(\$27,009)		
GMSW22A WLL Debris Removal - ONR Imp	\$5,394,180	\$2,026,230	\$3,100,000	\$5,126,230	\$267,950		
GMSW22A WLL Debris Removal - OR	\$5,470,099	\$2,096,667	\$3,035,841	\$5,132,509	\$337,590		
GMSW22A WLL Debris Removal - OR DM	\$75,919	\$70,436	\$35,841	\$106,277	(\$30,358)		
GMSW22A WLL Debris Removal - OR Imp	\$5,394,180	\$2,026,231	\$3,000,000	\$5,026,231	\$367,949		
GMSW23A Erosion Ctr Trial	\$0	\$0	\$0	\$0	\$0		
GMSW23A Erosion Ctr Trial - OR DM	\$0	\$0	\$0	\$0			
GMSW23A Erosion Ctr Trial - OR Imp	\$0	\$0	\$0	\$0			
GMSW24A WLL Boat Access	\$891,306	\$212,865	\$0	\$212,865	\$678,441	Project complete	
GMSW24A WLL Boat Access - OR DM	\$427,592	\$42,110	\$0	\$42,110	\$385,482		
GMSW24A WLL Boat Access - OR Imp	\$463,714	\$170,755	\$0	\$170,755	\$292,959		
GMSW25A WLL Bathymetric Ma	\$1,379,386	\$1,402,174	\$0	\$1,402,174	(\$22,788)	Additional reporting costs beyond the GMSW25 CWR approved budget	To be determined
GMSW25A WLL Bathymetric Ma - OR DM	\$50,979	\$53,030	\$0	\$53,030	(\$2,051)		
GMSW25A WLL Bathymetric Ma - OR Imp	\$1,328,407	\$1,349,144	\$0	\$1,349,144	(\$20,737)		
GMSW26A WLL Comm Safety	\$1,610,081	\$750,678	\$859,403	\$1,610,081	\$0		
GMSW26A WLL Comm Safety - OR DM	\$425,173	\$85,407	\$339,766	\$425,173			
GMSW26A WLL Comm Safety - OR Imp	\$1,184,908	\$665,272	\$519,636	\$1,184,908			
GMSW27A WLL Finlay River A	\$82,146	\$73,699	\$0	\$73,699	\$8,447	Project complete	
GMSW27A WLL Finlay River A - OR DM	\$21,284	\$12,198	\$0	\$12,198	\$9,086		
GMSW27A WLL Finlay River A - OR Imp	\$60,862	\$61,501	\$0	\$61,501	(\$639)		
GMSW28A Industry Feasibility	\$1,594,520	\$957,489	\$637,031	\$1,594,520	\$0		
GMSW28A Industry Feasibility - OR DM	\$114,520	\$90,405	\$24,115	\$114,520			
GMSW28A Industry Feasibility - OR Imp	\$1,480,000	\$867,084	\$612,916	\$1,480,000			
GMSW29A Lynx Creek	\$280,376	\$5,488	\$274,888	\$280,376	\$0		
GMSW29A Lynx Creek - OR DM	\$91,709	\$1,711	\$89,998	\$91,709			
GMSW29A Lynx Creek - OR Imp	\$188,667	\$3,777	\$184,890	\$188,667			
GMSW30A Taylor Ramp	\$260,501	\$255,123	\$0	\$255,123	\$5,378	Project complete	
GMSW30A Taylor Ramp - OR DM	\$2,641	\$20,454	\$0	\$20,454	(\$17,813)		
GMSW30A Taylor Ramp - OR Imp	\$257,860	\$234,668	\$0	\$234,668	\$23,192		
GMSW31A Kwadacha	\$354,136	\$126,384	\$227,752	\$354,136	\$0		
GMSW31A Kwadacha - ONR DM	\$165,469	\$3,679	\$161,790	\$165,469			
GMSW31A Kwadacha - ONR Imp	\$188,667	\$122,705	\$65,962	\$188,667			
GMSW32A BRD Deserter's Dump	\$0	\$54,866	\$0	\$54,866	(\$54,866)	Project deferred. Costs associated with design prior to decision.	
GMSW32A BRD Deserter's Dump - ONR DM	\$0	\$1,489	\$0	\$1,489	(\$1,489)		
GMSW32A BRD Deserter's Dump - ONR Imp	\$0	\$53,377	\$0	\$53,377	(\$53,377)		
GMSW33A BRD Ingenika	\$0	\$63,477	\$0	\$63,477	(\$63,477)	Project deferred pending ongoing conversations with local First Nations, Tsay Keh Dene, in particular. Costs associated with work prior to decision to defer.	TOR to be resubmitted reflecting decision from local First Nations.
GMSW33A BRD Ingenika - ONR DM	\$0	\$5,479	\$0	\$5,479	(\$5,479)		
GMSW33A BRD Ingenika - ONR Imp	\$0	\$57,998	\$0	\$57,998	(\$57,998)		
GMSW34A BRD Finlay Bay	\$0	\$62,736	\$0	\$62,736	(\$62,736)	Project cancelled.	
GMSW34A BRD Finlay Bay - ONR DM	\$0	\$5,854	\$0	\$5,854	(\$5,854)		
GMSW34A BRD Finlay Bay - ONR Imp	\$0	\$56,882	\$0	\$56,882	(\$56,882)		

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
GMSW35A BRD Six Mile Bay	\$0	\$55,535	\$0	\$55,535	(\$55,535)	Project cancelled.	
GMSW35A BRD Six Mile Bay - ONR DM	\$0	\$4,666	\$0	\$4,666	(\$4,666)		
GMSW35A BRD Six Mile Bay - ONR Imp	\$0	\$50,869	\$0	\$50,869	(\$50,869)		
GMSW36A BRD Cut Thumb Bay	\$0	\$59,186	\$0	\$59,186	(\$59,186)	Project cancelled.	
GMSW36A BRD Cut Thumb Bay - ONR DM	\$0	\$6,193	\$0	\$6,193	(\$6,193)		
GMSW36A BRD Cut Thumb Bay - ONR Imp	\$0	\$52,993	\$0	\$52,993	(\$52,993)		
GMSW37A BRD Mackenzie Landing	\$743,878	\$519,541	\$0	\$519,541	\$224,337	Project complete	
GMSW37A BRD Mackenzie Landing - ONR DM	\$24,396	\$15,766	\$0	\$15,766	\$8,630		
GMSW37A BRD Mackenzie Landing - ONR Imp	\$719,482	\$503,775	\$0	\$503,775	\$215,707		
GMSW38A Taylor Ramp Construct	\$5,408,200	\$5,404,060	\$0	\$5,404,060	\$4,140	Project complete	
GMSW38A Taylor Ramp Construct - OR DM	\$145,100	\$35,497	\$0	\$35,497	\$109,603		
GMSW38A Taylor Ramp Construct - OR Imp	\$5,263,100	\$5,368,563	\$0	\$5,368,563	(\$105,463)		
GMSW40A BRD Blackfoot Park	\$0	\$69,759	\$0	\$69,759	(\$69,759)	Project cancelled. Pre-construction phase costs	
GMSW40A BRD Blackfoot Park - OR DM	\$0	\$17,508	\$0	\$17,508	(\$17,508)		
GMSW40A BRD Blackfoot Park - OR Imp	\$0	\$76,224	\$0	\$76,224	(\$76,224)		
GMSW41A BRD Halfway River	\$0	\$52,642	\$0	\$52,642	(\$52,642)	Project deferred pending Site C and stakeholder agreement. Costs associated with work prior to 2011 CWR approval to defer.	TOR to be resubmitted reflecting decision on Site C and input from stakeholders.
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)		
GMSW43A BRC Ingenika	\$0	\$113	\$0	\$113	(\$113)	Project deferred pending ongoing conversations with local First Nations, Tsay Keh Dene, in particular.	
GMSW43A BRC Ingenika - ONR DM	\$0	\$113	\$0	\$113	(\$113)		
GMSW43A BRC Ingenika - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW44A BRC Finlay Bay	\$0	\$113	\$0	\$113	(\$113)	Project cancelled	
GMSW44A BRC Finlay Bay - ONR DM	\$0	\$113	\$0	\$113	(\$113)		
GMSW44A BRC Finlay Bay - ONR Imp	\$0	\$0	\$0	\$0	(\$0)		
GMSW45A BRC Six Mile Bay	\$0	\$0	\$0	\$0	\$0	Project cancelled	
GMSW45A BRC Six Mile Bay - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW45A BRC Six Mile Bay - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW46A BRC Cut Thumb Bay	\$0	\$113	\$0	\$113	(\$113)	Project cancelled	
GMSW46A BRC Cut Thumb Bay - ONR DM	\$0	\$113	\$0	\$113	(\$113)		
GMSW46A BRC Cut Thumb Bay - ONR Imp	\$0	\$0	\$0	\$0	(\$0)		
GMSW47A BRC Mackenzie Landing	\$4,242,756	\$1,616,874	\$2,151,466	\$3,768,340	\$474,416	Project complete.	
GMSW47A BRC Mackenzie Landing - ONR DM	\$55,854	\$44,104	\$9,530	\$53,634	\$2,220		
GMSW47A BRC Mackenzie Landing - ONR Imp	\$4,186,902	\$1,572,770	\$2,141,936	\$3,714,706	\$472,196		
GMSW48A BRC Blackfoot Park	\$0	\$45,481	\$0	\$45,481	(\$45,481)	Project cancelled. Pre-construction phase costs	
GMSW48A BRC Blackfoot Park - OR DM	\$0	\$5,026	\$0	\$5,026	(\$5,026)		
GMSW48A BRC Blackfoot Park - OR Imp	\$0	\$40,455	\$0	\$40,455	(\$40,455)		
GMSW49A BRC Dunlevy	\$4,205,000	\$0	\$0	\$0	\$0		
GMSW49A BRC Dunlevy - ONR DM	\$15,000	\$0	\$0	\$0	\$15,000		
GMSW49A BRC Dunlevy - ONR Imp	\$4,190,000	\$610,884	\$3,594,116	\$4,205,000	(\$15,000)		
GMSW50A BRC Elizabeth	\$0	\$0	\$0	\$0	\$0		
GMSW50A BRC Elizabeth - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW50A BRC Elizabeth - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW51A BRC Dinosaur	\$3,258,435	\$4,250,851	\$0	\$4,250,851	(\$992,416)	Project complete.	
GMSW51A BRC Dinosaur - ONR DM	\$180,300	\$6,156	\$0	\$6,156	\$174,144		
GMSW51A BRC Dinosaur - ONR Imp	\$3,078,135	\$4,244,695	\$0	\$4,244,695	(\$1,166,560)		
GMSW52A Halfway River	\$180,000	\$41,454	\$111,810	\$153,265	\$0		
GMSW52A Halfway River - OR DM	\$0	\$5,314	\$3,310	\$8,624	(\$8,624)		
GMSW52A Halfway River - OR Imp	\$180,000	\$36,141	\$135,235	\$171,376	\$8,624		
GMSW53A BRD Dinosaur	\$87,965	\$62,315	\$0	\$62,315	\$25,650	Design phase complete	
GMSW53A BRD Dinosaur - ONR DM	\$12,965	\$9,694	\$0	\$9,694	\$3,271		
GMSW53A BRD Dinosaur - ONR Imp	\$75,000	\$52,621	\$0	\$52,621	\$22,379		
GMSW54A BRD Dunlevy	\$1,247,610	\$876,325	\$0	\$876,325	\$371,285	Design phase complete	
GMSW54A BRD Dunlevy - ONR DM	\$46,765	\$29,283	\$0	\$29,283	\$17,482		
GMSW54A BRD Dunlevy - ONR Imp	\$1,200,845	\$847,042	\$0	\$847,042	\$353,803		
GMSW55A Blackfoot Maintenance	\$0	\$0	\$0	\$0	\$0		
GMSW55A Blackfoot Maintenance - OR DM	\$0	\$0	\$0	\$0	\$0		
GMSW55A Blackfoot Maintenance - OR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW56A Dinosaur Maintenance	\$100,000	\$13,170	\$183,110	\$196,281	(\$6,781)	The April 2011 resubmission letter for maintenance costs did not consider direct management costs.	Review budget and resubmit TOR by December 30, 2014
GMSW56A Dinosaur Maintenance - ONR DM	\$0	\$3,670	\$3,110	\$6,781	(\$6,781)		
GMSW56A Dinosaur Maintenance - ONR Imp	\$100,000	\$9,500	\$90,500	\$100,000	\$0		
GMSW57A Dunlevy Maintenance	\$194,971	\$116,777	\$193,144	\$309,921	\$0		
GMSW57A Dunlevy Maintenance - ONR DM	\$13,000	\$6,567	\$6,433	\$13,000	\$0		
GMSW57A Dunlevy Maintenance - ONR Imp	\$181,971	\$110,209	\$71,762	\$181,971	\$0		
GMSW58A Mackenzie Maintenance	\$150,000	\$0	\$150,000	\$150,000	\$0	The April 2011 resubmission letter for maintenance costs did not consider direct management costs.	Review budget and resubmit TOR by December 30, 2014
GMSW58A Mackenzie Maintenance - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW58A Mackenzie Maintenance - ONR Imp	\$150,000	\$0	\$150,000	\$150,000	\$0		
GMSW59A Ingenika Maintenance	\$0	\$0	\$0	\$0	\$0		
GMSW59A Ingenika Maintenance - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW59A Ingenika Maintenance - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW60A Finlay Maintenance	\$0	\$0	\$0	\$0	\$0		
GMSW60A Finlay Maintenance - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW60A Finlay Maintenance - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW61A 6 Mile Maintenance	\$0	\$0	\$0	\$0	\$0		
GMSW61A 6 Mile Maintenance - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW61A 6 Mile Maintenance - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW62A CutThumb Maintenance	\$0	\$0	\$0	\$0	\$0		
GMSW62A CutThumb Maintenance - ONR DM	\$0	\$0	\$0	\$0	\$0		
GMSW62A CutThumb Maintenance - ONR Imp	\$0	\$0	\$0	\$0	\$0		
GMSW63A Taylor Maintenance	\$204,443	\$4,638	\$188,338	\$192,976	\$0		
GMSW63A Taylor Maintenance - OR DM	\$18,585	\$4,638	\$13,947	\$18,585	\$0		
GMSW63A Taylor Maintenance - OR Imp	\$185,858	\$0	\$185,858	\$185,858	\$0		
OR - Ordered Remissible							
ONR - Ordered Non-Remissible							

* Red values in parentheses denote overage.