

## **Duncan Dam Project Water Use Plan**

### **Monitoring Programs and Physical Works Annual Report: 2015**

#### **Implementation Period: April 2014 to March 2015**

- DDMMON-1 Lower Duncan River Ramping Rate Monitoring
- DDMMON-2 Lower Duncan River Habitat Use Monitoring
- DDMMON-3 Lower Duncan River Hydraulic Model Development
- DDMMON-4 Lower Duncan River Kokanee Spawning Monitoring
- DDMMON-5 Upper Duncan River Bull Trout Migration Monitoring
- DDMMON-6 Lower Duncan Dam Bull Trout Passage Monitoring
- DDMMON-7 Lower Duncan River Water Quality Monitoring
- DDMMON-8 Duncan Watershed Riparian and Cottonwood Monitoring
- DDMMON-9 Lower Duncan River Mosquito Monitoring and Management Plan Development
- DDMMON-10 Duncan Reservoir Fish Habitat Use Monitoring
- DDMMON-11 Duncan Reservoir Burbot Monitoring
- DDMMON-12 Duncan Reservoir Archaeological Overview Assessment
- DDMMON-13 Duncan Reservoir Archaeological Site Erosion Monitoring
- DDMMON-14 Duncan Wildlife Use Monitoring
- DDMMON-15 Lower Duncan River Stranding Protocol Development and Finalization
- DDMMON-16 Lower Duncan River Fish Stranding Impact Monitoring
- DDMMON-17 Duncan Reservoir Kokanee Stock Assessment
- DDMWORKS-1 Lower Duncan River Argenta Slough Erosion Protection
- DDMWORKS-2 Duncan Reservoir Glacier Creek Boat Ramp Extension
- DDMWORKS-3 Plan to Address Nutrient Retention Caused by Duncan Dam Operations
- DDMWORKS-4 Action Plan to Minimize Stranding of Kokanee Spawning in Lower Duncan River Sidechannels

**For Conditional Water Licence for Duncan Dam and Reservoir 27027**

**April 30, 2015**

## **BC Hydro Duncan Dam Project Water Use Plan Monitoring Programs and Physical Works Annual Report: 2015**

### **1 Introduction**

This document represents a summary of the status and the results of the Duncan Dam Water Use Plan (WUP) monitoring programs and physical works to March 31, 2015, as per the Duncan Dam Order under the *Water Act*, dated December 21, 2007. There are seventeen monitoring programs and four physical works.

### **2 Status**

The following table outlines the dates that Terms of Reference (TOR) for the Duncan Dam WUP monitoring programs and physical works were submitted to and approved by the CWR.

**Table 2-1: Dates of Duncan Dam 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
DDMMON-1 Lower Duncan River Ramping Rate Monitoring	Clause 5(e)	Apr 03, 2008	Apr 30, 2008		
DDMMON-2 Lower Duncan River Habitat Use Monitoring	Clause 5(e)	Aug 07, 2008	Sep 9, 2008		
DDMMON-3 Lower Duncan River Hydraulic Model Development	Clause 5(e)	Apr 03, 2008	Apr 30, 2008	Mar 31, 2014	Jul 28, 2014
DDMMON-4 Lower Duncan River Kokanee Spawning Monitoring	Clause 6(a)	Apr 03, 2008	Apr 30, 2008	Dec 19, 2008	Mar 17, 2009
DDMMON-5 Upper Duncan River Bull Trout Migration Monitoring	Clause 6(b)	Jan 23, 2008	Mar 05, 2008	Feb 22, 2010	Mar 18, 2010
DDMMON-6 Lower Duncan Dam Bull Trout Passage Monitoring	Clause 6(b)	Jan 23, 2008	Mar 05, 2008		
DDMMON-7 Lower Duncan River Water Quality Monitoring	Clause 6(c)	Dec 16, 2008	Mar 11, 2009		
DDMMON-8 Duncan Riparian Monitoring	Clause 6(d)	Aug 07, 2008	Sep 09, 2008	Nov 01, 2012	Nov 15, 2012
DDMMON-9 Lower Duncan River Mosquito Monitoring and Management Plan Development	Clause 6(e)	Aug 07, 2008	Sep 09, 2008	May 13, 2013	Jun 13, 2013
DDMMON-10 Duncan Reservoir Fish Habitat Use Monitoring	Clause 6(f)	Dec 16, 2008	Mar 11, 2009		
DDMMON-11 Duncan Reservoir Burbot Monitoring	Clause 6(g)	Apr 03, 2008	Apr 30, 2008	May 01, 2013	May 29, 2013
DDMMON-12 Duncan Reservoir Archaeological Overview Assessment	Clause 5(f)	Dec 04, 2009	Feb 05, 2010		
DDMMON-13 Duncan Reservoir Archaeological Site Erosion Monitoring	Clause 5(g)	Dec 04, 2009	Apr 07, 2010		
DDMMON-14 Duncan Wildlife Use Monitoring	Clause 6(h)	Aug 07, 2008	Sep 09, 2008		
DDMMON-15 Lower Duncan River Stranding Protocol Development and Finalization	Clause 5(e)	Dec 16, 2008	Mar 11, 2009	Jul 30, 2009	Aug 31, 2009

Monitoring Program & Physical Works TOR	Order Clause	Original ToR Submission		Most Recent ToR Resubmission	
		Date Submitted	Date Approved	Date Submitted	Date Approved
DDMMON-16 Lower Duncan River Fish stranding impact monitoring	Clause 5(e)	Jul 23, 2008	Sep 08, 2008		
DDMMON-17 Duncan Reservoir Kokanee Stock Assessment	Clause 6(f)	Dec 04, 2009	Apr 08, 2010		
DDMMWORKS-1 Argenta Slough Erosion Protection	Clause 5(a)	Jan 23, 2008	Mar 18, 2008	Jul 30, 2014	Aug 19, 2014
DDMMWORKS-2 Glacier Creek Boat Ramp	Clause 5(b)	Jan 23, 2008	Mar 18, 2008		
DDMMWORKS-3 Plan to Address Nutrient Retention Caused by Duncan Dam Operations	Clause 5(d)	Jan 23, 2008	Mar 18, 2008		
DDMMWORKS-4 Action Plan to Minimize Stranding of Kokanee Spawning in Lower Duncan River Sidechannels	Clause 5(c)	Dec 04, 2009	Apr 08, 2010	Dec 03, 2013	Jan 15, 2014

### 3 Schedule

The following table outlines the current schedule for the monitoring programs and physical works being delivered for the Duncan Dam WUP.

**Table 3-1: Table of WUP Schedule**

Monitoring Programs	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	WLR YR1	WLR YR2	WLR YR3	WLR YR4	WLR YR5	WLR YR6	WLR YR7	WLR YR8	WLR YR9	WLR YR10	WLR YR11 Final Review
DDMMON-1 Lower Duncan River Ramping Rate Monitoring	✓	✓								■	
DDMMON-2 Lower Duncan River Habitat Use Monitoring	✓	✓	✓	✓	✓						
DDMMON-3 Lower Duncan River Hydraulic Model Development		✓	✓		✓					■	
DDMMON-4 Lower Duncan River Kokanee Spawning Monitoring	✓	✓	✓	✓	✓	✓	✓	■	■	■	
DDMMON-5 Upper Duncan River Bull Trout Migration Monitoring	✓	✓			✓	✓		■		■	
DDMMON-6 Lower Duncan Dam Bull Trout Passage Monitoring	✓	✓	✓	×					■	■	■
DDMMON-7 Lower Duncan River Water Quality Monitoring			✓	✓	✓						
DDMMON-8 Duncan Riparian Monitoring		✓	✓		✓	✓	✓	■	■	■	■
DDMMON-9 Lower Duncan River Mosquito Monitoring and Management Plan Development		✓	✓	✓	✓		✓		■		■
DDMMON-10 Duncan Reservoir Fish Habitat Use Monitoring		✓	✓	✓	✓		✓		■		■
DDMMON-11 Duncan Reservoir Burbot Monitoring		✓	✓	✓			✓	■			
DDMMON-12 Duncan Reservoir Archeological Overview Assessment			✓								

Monitoring Programs	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	WLR YR1	WLR YR2	WLR YR3	WLR YR4	WLR YR5	WLR YR6	WLR YR7	WLR YR8	WLR YR9	WLR YR10	WLR YR11 Final Review
DDMMON-13 Duncan Reservoir Archeological Site Erosion Monitoring				✓	✓	✓	✓	■			
DDMMON-14 Duncan Wildlife Use Monitoring		✓		✓			x			■	
DDMMON-15 Lower Duncan River Stranding Protocol Development and Finalization		✓	✓	✓	✓	✓	✓	■	■	■	■
DDMMON-16 Lower Duncan River Fish stranding impact monitoring	✓	✓	✓	✓	✓	✓	✓	■	■	■	
DDMMON-17 Duncan Reservoir Kokanee Stock Assessment									■	■	■
<b>Physical Works</b>											
DDMWORKS-1 Argenta Slough Erosion Protection	✓	✓	x				x				
DDMWORKS-2 Glacier Creek Boat Ramp	x	✓									
DDMWORKS-3 Kootenay Lake Nutrient Loading Funding	✓	✓	✓	✓	✓	✓	✓	■	■	■	
DDMWORKS-4 Action Plan to minimize stranding of kokanee stranding in Lower Duncan River Sidechannels						✓	x	■	■	■	■
Legend: ■ = Program to be undertaken/initiated in identified year u/w = Program is under way ✓ = Program completed for the year x = Program started, but encountered operational or hydrological delays											

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

The monitoring programs and physical works being implemented under the Duncan Dam 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/southern\\_interior/duncan\\_dam.html](http://www.bchydro.com/about/sustainability/conservation/water_use_planning/southern_interior/duncan_dam.html)

#### 5 Summary of Monitoring Programs

##### 5.1 DDMMON-1 Lower Duncan River Ramping Rate Monitoring

###### 5.1.1 Status

This monitoring program was initiated in 2008 and does not implement again until 2017.

## **5.2 DDMMON-2 Lower Duncan River Habitat Use Monitoring**

### **5.2.1 Status**

This monitoring project was initiated in 2008 and complete in 2012.

## **5.3 DDMMON-3 Lower Duncan River Hydraulic Development**

### **5.3.1 Status**

This monitoring program was initiated in 2009. The next update to the hydraulic model will occur in 2017.

## **5.4 DDMMON-4 Lower Duncan River Kokanee Spawning Monitoring**

### **5.4.1 Status**

This monitoring program was initiated in 2008 and will be carried out every year over ten years. Due to an increase in data analyses for this study, the Year 6 (2013) will be submitted, along with Year 7 (2014), in next year's annual report.

## **5.5 DDMMON-5 Upper Duncan River Bull Trout Migration Monitoring**

### **5.5.1 Status**

This monitoring program was initiated in 2008 and will be carried out periodically over ten years. No implementation occurred in 2014 and will implement again in 2015 and 2017. The Year 4 report (2013 data) will be submitted in next year's annual report.

## **5.6 DDMMON-6 Lower Duncan Dam Bull Trout Passage Monitoring**

### **5.6.1 Status**

This monitoring program was initiated in 2008 for three years. Post-monitoring will recommence in 2016 for three years after the implementation of a new weir.

## **5.7 DDMMON-7 Lower Duncan River Water Quality Monitoring**

### **5.7.1 Status**

This monitoring program was initiated in 2010 and was completed in 2012.

## **5.8 DDMMON-8 Duncan Watershed Riparian and Cottonwood Monitoring**

This project has been divided into two discrete monitoring components based on their locations in the Duncan River watershed.

## **5.8.1 DDMMON-8-1 Lower Duncan River Riparian Cottonwood Monitoring**

### **5.8.1.1 Status**

This monitoring program was initiated in 2009 and with the exception of 2011, will be carried out every year over ten years. Attached is the report for Year 5 dated March 2015.

## **5.8.2 DDMMON-8-2 Duncan Reservoir Riparian Monitoring**

### **5.8.2.1 Status**

This monitoring program was initiated in 2009, implemented in 2012, and will next be carried out in 2015 and 2018.

## **5.9 DDMMON-9 Lower Duncan River Mosquito Monitoring and Management Plan Development**

### **5.9.1 Status**

This monitoring program was initiated in 2009 and will be carried out periodically over ten years. The Year 5 report (2014) will be submitted in next year's annual report.

## **5.10 DDMMON-10 Duncan Reservoir Fish Habitat Use Monitoring**

### **5.10.1 Status**

This monitoring program was initiated in 2009 and will be carried out periodically over ten years. There was no implementation in 2015. The report for Year 6 (2014) will be submitted in next year's annual report.

## **5.11 DDMMON-11 Duncan Reservoir Burbot Monitoring**

### **5.11.1 Status**

This monitoring program was initiated in 2009 and as a result of 2011 implementation the Terms of Reference were revised and accepted on May 29, 2013. The project is now a five-year physical modelling study that implements in 2014 and 2015. Attached is the report for Year 4 (2014) dated January 21, 2015.

## **5.12 DDMMON-12 Duncan Reservoir Archaeological Overview Assessment**

### **5.12.1 Status**

This study was initiated in 2010 and was completed in 2011.

### **5.13 DDMMON-13 Duncan Reservoir Archaeological Site Erosion Monitoring**

#### **5.13.1 Status**

This monitoring program was initiated in 2011 and will be carried out every year for five years. Attached is the report for Year 4 dated November 12, 2014.

### **5.14 DDMMON-14 Duncan Wildlife Use Monitoring**

#### **5.14.1 Status**

This monitoring program was initiated in 2009 and implemented in 2011. The 2014 field season was cancelled because, based on an external review of this study, the Terms of Reference (TOR) need revision and to incorporate the latest findings from DDMMON-8.

Changes to the Terms of Reference are more extensive than expected and require further input from additional qualified experts, the TOR revision will not be prepared by April 30, 2015 as originally outlined. A TOR revision will be submitted to your office by January 29, 2016.

### **5.15 DDMMON-15 Lower Duncan River Stranding Protocol Development and Finalization**

#### **5.15.1 Status**

This monitoring program was initiated in 2009 and will be carried out every year for ten years. The planned 2014 workshop to review the draft protocol was deferred to 2015 due to unresolved issues with the report. As a result, the report for Year 4 (2012-2013) will be submitted in next year's annual report.

### **5.16 DDMMON-16 Lower Duncan River Fish Stranding Impact Monitoring**

#### **5.16.1 Status**

This monitoring program was initiated in 2008 and will be carried out every year for ten years. The Year 6 report (April 2013 to April 2014) will be submitted in next year's annual report.

### **5.17 DDMMON-17 Duncan Reservoir Kokanee Stock Assessment**

#### **5.17.1 Status**

This study will be carried out every year for three years commencing in 2016.

## **6 Summary of Physical Works**

### **6.1 DDMWORKS-1 Argenta Slough Erosion Protection**

#### **6.1.1 Status**

The regulators (Department of Fisheries and Oceans and Ministry of Forests, Lands and Natural Resources) do not support proceeding with any proposed physical works. The regulators have agreed to continue erosion monitoring and the creation of an ecological inventory of the areas of the slough that are threatened by a breach.

The Ecological Inventory is being finalized and will be submitted with next year's annual report.

### **6.2 DDMWORKS-2 Glacier Creek Boat Ramp Extension**

#### **6.2.1 Status**

The ramp was completed in May 2009. An engineer's inspection of the ramp occurred on May 7, 2014.

### **6.3 DDMWORKS-3 Plan to Address Nutrient Retention Caused by Duncan Dam Operations**

#### **6.3.1 Status**

Payments are made annually to the amount of 17.5% of the previous years fertilization cost as per the letter of agreement between BC Hydro and the Fish and Wildlife Compensation Program (FWCP). In 2014, the payment was \$144,112.50.

### **6.4 DDMWORKS-4 Action Plan to Minimize Stranding of Kokanee Spawning in Lower Duncan River Sidechannels**

#### **6.4.1 Status**

The regulators (Department of Fisheries and Oceans and Ministry of Forests, Lands and Natural Resources) rejected physical works given issues with logistics, annual maintenance and potential secondary effects on other resources in the area. As an alternate method to mitigate kokanee stranding, an opportunistic alteration to the flow regime was realized from September 2013 to February 2014. The evaluation of this modified flow regime was conducted in Year 6 of DDMMON-4. As noted above in this report, the Year 6 for DDMMON-4 will be submitted in next year's annual report.

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

The following table summarizes the Duncan Dam WUP monitoring programs and physical works costs approved by the Comptroller and the Actual Costs to March 31, 2015.



Table 7-1: Duncan Dam 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
<b>DDM Prepare Annual Report</b>	\$25,300	\$8,964	\$12,392	\$21,356	\$3,944		
<b>DDMM01A Ramping Rate</b>	\$247,883	\$125,967	\$116,354	\$242,321	\$5,562	Efficiencies found during project implementation	
DDMM01A Ramping Rate - ONR DM	\$34,639	\$17,643	\$12,354	\$29,997	\$4,642		
DDMM01A Ramping Rate - ONR Imp	\$213,244	\$108,324	\$104,000	\$212,324	\$920		
<b>DDMM02A Low Duncan HabitatUse</b>	\$566,815	\$502,057		\$502,057	\$64,758	Project complete	
DDMM02A Low Duncan HabitatUse - ONR DM	\$84,707	\$40,585		\$40,585	\$44,122		
DDMM02A Low Duncan HabitatUse - ONR Imp	\$482,108	\$461,472		\$461,472	\$20,636		
<b>DDMM03A Low Duncan Hydraulic</b>	\$674,088	\$566,417	\$89,469	\$655,886	\$18,202	Efficiencies found during project implementation	
DDMM03A Low Duncan Hydraulic - ONR DM	\$88,037	\$76,207	\$8,674	\$84,882	\$3,155		
DDMM03A Low Duncan Hydraulic - ONR Imp	\$586,051	\$490,210	\$80,795	\$571,005	\$15,046		
<b>DDMM04A Low Duncan Kokanee Sp</b>	\$1,462,700	\$675,228	\$427,862	\$1,103,090	\$359,610	Efficiencies found during project implementation	
DDMM04A Low Duncan Kokanee Sp - ONR DM	\$148,850	\$47,379	\$38,763	\$86,142	\$62,708		
DDMM04A Low Duncan Kokanee Sp - ONR Imp	\$1,313,850	\$627,849	\$389,099	\$1,016,948	\$296,902		
<b>DDMM05A Up Duncan Bull Study</b>	\$436,738	\$244,510	\$161,337	\$405,847	\$30,891	Efficiencies found during project implementation	
DDMM05A Up Duncan Bull Study - ONR DM	\$88,738	\$36,692	\$32,102	\$68,794	\$19,944		
DDMM05A Up Duncan Bull Study - ONR Imp	\$348,000	\$207,818	\$129,235	\$337,053	\$10,947		
<b>DDMM06A Low Duncan Bull Pass</b>	\$280,970	\$93,135	\$107,385	\$200,520	\$80,450	Efficiencies found during project implementation	
DDMM06A Low Duncan Bull Pass - ONR DM	\$78,970	\$27,205	\$7,385	\$34,590	\$44,380		
DDMM06A Low Duncan Bull Pass - ONR Imp	\$202,000	\$65,930	\$100,000	\$165,930	\$36,070		
<b>DDMM07A Low Duncan Water Qual</b>	\$154,827	\$106,114		\$106,114	\$48,713	Project complete	
DDMM07A Low Duncan Water Qual - ONR DM	\$43,003	\$22,077		\$22,077	\$20,926		
DDMM07A Low Duncan Water Qual - ONR Imp	\$111,824	\$84,037		\$84,037	\$27,787		
<b>DDMM08A Low Duncan Riparian</b>	\$1,457,738	\$634,875	\$686,142	\$1,321,017	\$136,721	Efficiencies found during project implementation	
DDMM08A Low Duncan Riparian - ONR DM	\$192,758	\$66,159	\$66,861	\$133,019	\$59,739		
DDMM08A Low Duncan Riparian - ONR Imp	\$1,264,980	\$568,716	\$619,281	\$1,187,997	\$76,983		
<b>DDMM09A LDR Mosquito Mon</b>	\$730,574	\$433,531	\$255,532	\$689,063	\$41,511	Efficiencies found during project implementation	
DDMM09A LDR Mosquito Mon - ONR DM	\$122,310	\$84,527	\$40,785	\$125,312	(\$3,002)		
DDMM09A LDR Mosquito Mon - ONR Imp	\$608,264	\$349,004	\$214,747	\$563,751	\$44,513		
<b>DDMM10A Res Seasonal Habitat</b>	\$791,362	\$563,043	\$157,327	\$720,370	\$70,992	Efficiencies found during project implementation	
DDMM10A Res Seasonal Habitat - ONR DM	\$117,205	\$52,834	\$31,970	\$84,804	\$32,401		
DDMM10A Res Seasonal Habitat - ONR Imp	\$674,157	\$510,209	\$125,357	\$635,566	\$38,591		
<b>DDMM11A Duncan Burbot</b>	\$829,768	\$567,705	\$28,363	\$596,068	\$233,700	Efficiencies found during project implementation	
DDMM11A Duncan Burbot - ONR DM	\$173,632	\$54,995	\$8,193	\$63,187	\$110,445		
DDMM11A Duncan Burbot - ONR Imp	\$656,136	\$512,710	\$20,171	\$532,881	\$123,255		
<b>DDMM12A Duncan Arch Assess</b>	\$68,632	\$71,521		\$71,521	(\$2,889)	Project complete	
DDMM12A Duncan Arch Assess - ONR DM	\$21,870	\$26,992		\$26,992	(\$5,122)		
DDMM12A Duncan Arch Assess - ONR Imp	\$46,762	\$44,529		\$44,529	\$2,233		
<b>DDMM13A Duncan Arch Monitor</b>	\$306,185	\$186,989	\$53,247	\$240,236	\$65,949	Efficiencies found during project implementation	
DDMM13A Duncan Arch Monitor - ONR DM	\$79,579	\$62,818	\$10,400	\$73,217	\$6,362		
DDMM13A Duncan Arch Monitor - ONR Imp	\$226,606	\$124,171	\$42,847	\$167,018	\$59,588		
<b>DDMM14A DuncanResRiparianWLD</b>	\$450,955	\$223,510	\$25,908	\$249,418	\$201,537	Project halted until new Terms of Reference submitted.	Terms of Reference to be submitted.
DDMM14A DuncanResRiparianWLD - ONR DM	\$97,167	\$65,773	\$25,908	\$91,680	\$5,487		
DDMM14A DuncanResRiparianWLD - ONR Imp	\$353,788	\$157,738		\$157,738	\$196,050		
<b>DDMM15A LDR StrandingProtocol</b>	\$257,049	\$112,529	\$102,971	\$215,500	\$41,549	Efficiencies found during project implementation	
DDMM15A LDR StrandingProtocol - ONR DM	\$71,421	\$22,406	\$34,371	\$56,776	\$14,645		
DDMM15A LDR StrandingProtocol - ONR Imp	\$185,628	\$90,124	\$68,600	\$158,724	\$26,904		
<b>DDMM16A LDR Stranding Assess</b>	\$1,002,995	\$555,567	\$348,099	\$903,666	\$99,329	Efficiencies found during project implementation	
DDMM16A LDR Stranding Assess - ONR DM	\$144,330	\$43,216	\$37,985	\$81,201	\$63,129		
DDMM16A LDR Stranding Assess - ONR Imp	\$858,665	\$512,351	\$310,114	\$822,465	\$36,200		
<b>DDMM17A Duncan Res KoK Mon</b>	\$248,583	\$460	\$238,727	\$239,187	\$9,396	Efficiencies found during project implementation	
DDMM17A Duncan Res KoK Mon - ONR DM	\$49,281	\$460	\$39,425	\$39,885	\$9,396		
DDMM17A Duncan Res KoK Mon - ONR Imp	\$199,302		\$199,302	\$199,302			
<b>DDMW01A Argenta Slough Eros</b>	\$270,861	\$146,848	\$11,098	\$157,946	\$112,915	Efficiencies found during project implementation	
DDMW01A Argenta Slough Eros - ONR DM	\$47,561	\$40,946	\$11,098	\$52,044	(\$4,483)		
DDMW01A Argenta Slough Eros - ONR Imp	\$223,300	\$105,901		\$105,901	\$117,399		
<b>DDMW02A Glacier Creek Boat</b>	\$197,339	\$123,951		\$123,951	\$73,388	Efficiencies found during project implementation	
DDMW02A Glacier Creek Boat - ONR DM	\$71,139	\$37,375		\$37,375	\$33,764		
DDMW02A Glacier Creek Boat - ONR Imp	\$126,200	\$86,576		\$86,576	\$39,624		
<b>DDMW03A Plan Nutrient Reten</b>	\$1,496,979	\$909,305	\$452,452	\$1,361,757	\$135,222	Efficiencies found during project implementation	
DDMW03A Plan Nutrient Reten - ONR DM	\$40,979	\$3,012		\$3,012	\$37,967		
DDMW03A Plan Nutrient Reten - ONR Imp	\$1,456,000	\$906,293	\$452,452	\$1,358,745	\$97,255		
<b>DDMW04A Action Plan Kokanee</b>	\$241,650	\$12,690	\$131,492	\$144,182	\$97,468	Efficiencies found during project implementation	
DDMW04A Action Plan Kokanee - ONR DM	\$90,342	\$12,534	\$36,415	\$48,950	\$41,392		
DDMW04A Action Plan Kokanee - ONR Imp	\$151,308	\$155	\$95,077	\$95,232	\$56,076		

OR - Ordered Remissible  
ONR - Ordered Non-Remissible

\* Red values in parentheses denote overage.