



Columbia River Water Use Plan Kinbasket & Arrow Reservoir Revegetation Management Plan Monitoring Program and Physical Works

Annual Report: 2022

Implementation Period: February 2021 to January 2022

- **CLBMON-9 Kinbasket Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis**
- **CLBMON-10 Kinbasket Reservoir Inventory of Vegetation Resources**
- **CLBMON-11A Wildlife Effectiveness Monitoring of Revegetation in Kinbasket Reservoir**
- **CLBMON-11B Wildlife Effectiveness Monitoring of Revegetation and Wildlife Physical Works in the Arrow Lakes Reservoir**
- **CLBMON-12 Arrow Lakes Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis**
- **CLBMON-13 Inventory of Mosquito Populations in the Revelstoke Area**
- **CLBMON-33 Arrow Lakes Reservoir Inventory of Vegetation Resources**
- **CLBMON-35 Arrow Lakes Reservoir Plant Response to Inundation**
- **CLBMON-57 Plant Communities**
- **CLBWORKS-1 Kinbasket Reservoir Revegetation Program Physical Works**
- **CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works**

Conditional Water Licences for Kinbasket storage (27068 and 39432), Mica diversion (39431), Revelstoke diversion and storage (47215), and Arrow storage (27066)

February 28, 2022

BC Hydro Columbia River Project Water Use Plan Kinbasket & Arrow Reservoir Revegetation Management Plan Monitoring Programs and Physical Works Annual Report: 2022

1 Introduction

This document represents a summary of the status and the results of the Columbia River Kinbasket and Arrow Reservoir Revegetation Management Plan Water Use Plan (WUP) monitoring programs and physical works to January 31, 2022, as per the Columbia River Order under the *Water Act*, dated January 26, 2007. There are nine monitoring programs and two physical works.

2 Status

The following table outlines the dates that Terms of Reference (TOR) for the Kinbasket and Arrow Reservoir Revegetation Management Plan WUP monitoring programs and physical works were submitted to and approved by the CWR.

Table: 2-1: Dates of Kinbasket and Arrow Reservoir Revegetation 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
CLBMON-9 Kinbasket Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis	Schedule A, Clause 2(a)	Jan 25, 2008	Mar 03, 2008	Feb 12,2021	Mar 09, 2021
CLBMON-10 Kinbasket Reservoir Inventory of Vegetation Resources	Schedule A, Clause 2(b)	Apr 04, 2007	Apr 19, 2007	Jan 12, 2009	Apr 08, 2009
CLBMON-11A Wildlife Effectiveness Monitoring of Revegetation in Kinbasket Reservoir	Schedule A, Clause 2(c)	Jan 25, 2008	Feb 26, 2008	Jun 13, 2017	Aug 18, 2017
CLBMON-11B Wildlife Effectiveness Monitoring of Revegetation and Wildlife Physical Works in the Arrow Lakes Reservoir	Schedule C, Clause 5(a); Schedule D, Clause 2(a)	Apr 03, 2009	May 11, 2009	Jun 29, 2017	Aug 18, 2017
CLBMON-12 ONR Arrow Lakes Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis	Schedule C, Clause 2(a) (b); Schedule D, Clause 2(b) (c)	Jan 12, 2009	Apr 08, 2009	Mar 29, 2016	Apr 19, 2016
CLBMON-12 OR Arrow Lakes Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis	Schedule C, Clause 2(a) (b); Schedule D, Clause 2(b) (c)	Jan 25, 2008	Mar 03, 2008	Dec 18,2020	Jan 14 ,2021
CLBMON-13 Inventory of Mosquito Populations in the Revelstoke Area	Schedule C, Clause 5(b)	Jan 25, 2008	Feb 26, 2008		
CLBMON-33 ONR Arrow Lakes Reservoir Inventory of Vegetation Resources	Schedule C, Clause 2(b) Schedule D, Clause 2(c)	Jan 12, 2009	Apr 08, 2009		
CLBMON-33 Arrow Lakes Reservoir Inventory of Vegetation Resources	Schedule C, Clause 2(b) Schedule D, Clause 2(c)	Apr 04, 2007	Apr 19, 2007	Jan 12, 2009	Apr 08, 2009
CLBMON-35 Arrow Lakes Reservoir Plant Response to Inundation	Schedule C, Clause 2(c); Schedule D, Clause 2(d)	Jan 25, 2008	Apr 08, 2008	Jan 13, 2016	Mar 10, 2016
CLBMON-57 Plant Communities	Clause 2.a Amended Order	May 16, 2013	Jul 02, 2013		
CLBWORKS-1 Kinbasket Reservoir Revegetation Program Physical Works	Schedule A, Clause 1(a)	Apr 27, 2007	May 03, 2007	Jun 01, 2015	Jun 10, 2015
CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works (Phase 1)	Schedule C, Clause 1(a); Schedule D, Clause 1(a)	Apr 27, 2007	May 03, 2007		
CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works (Phase 2)	Schedule C, Clause 1(a); Schedule D, Clause 1(a)	Feb 26, 2008	Apr 23, 2008		
CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works (Phase 3)	Schedule C, Clause 1(a); Schedule D, Clause 1(a)	Jul 06, 2010	Aug 10, 2010		
CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works (Phase 4)	Schedule C, Clause 1(a); Schedule D, Clause 1(a)	Feb 18, 2013	Mar 05, 2013		

3 Schedule

The following table outlines the current schedule for the monitoring programs and physical works being delivered for the Kinbasket and Arrow Reservoir Revegetation Management Plan WUP.

Table 3-1: Monitoring Programs and Physical Works Schedule as of January 31, 2022

Monitoring Programs	2007 WLR YR1	2008 WLR YR2	2009 WLR YR3	2010 WLR YR4	2011 WLR YR5	2012 WLR YR6	2013 WLR YR7	2014 WLR YR8	2015 WLR YR9	2016 WLR YR10	2017 WLR YR11	2018 WLR YR12	2019 WLR YR13	2020 WLR YR14	2021 WLR YR15	2022 WLR YR16	2023 WLR YR17	2024 WLR YR18	2025 WLR YR19	2026 WLR YR20
CLBMON-9 Kinbasket Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis		✓	✓		✓		✓		✓			✓			✓	■	■	■	■	
CLBMON-10 Kinbasket Reservoir Inventory of Vegetation Resources	✓	✓		✓		✓		✓		✓							■			
CLBMON-11A Wildlife Effectiveness Monitoring of Revegetation in Kinbasket Reservoir		✓	✓	✓		•	✓*	✓	✓	✓	✓	✓F								
CLBMON-11B Wildlife Effectiveness Monitoring of Revegetation in the Arrow Lakes Reservoir			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	■	■	•	•	
CLBMON-12 Arrow Lakes Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis		✓	✓		✓		✓		✓		✓				✓	■	■	■	■	■
CLBMON-13 Inventory of Mosquito Populations in the Revelstoke Area			✓F																	
CLBMON-33 Arrow Lakes Reservoir Inventory of Vegetation Resources	✓	✓		✓		✓		✓		✓							■			
CLBMON-35 Arrow Lakes Reservoir Plant Response to Inundation											✓		✓F							
CLBMON-57 Plant Communities												✓F								
Physical Works																				
CLBWORKS-1 Kinbasket Reservoir Revegetation Program Physical Works	✓	✓	✓	✓	✓	x	✓		✓	✓										
CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works	✓	✓	✓	✓	✓								✓		✓	✓F				

Legend: ■ = Program to be undertaken/initiated in identified year
 ■ = Program planned prior to WUPOR
 ✓ = Program completed for the year
 x = Program started, but encountered operational or hydrological delays
 ✓F = All field work for this project is complete. No further field work is planned.
 • = Partial implementation
 Footnote: * Deviation from TOR schedule in 2012, replacement year was 2013.

4 Monitoring Programs and Physical Works Terms of Reference

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

http://www.BC Hydro.com/about/sustainability/conservation/water_use_planning/southern_interior/columbia_river/kinbasket-revegetation.html

5 Status of Monitoring Programs

5.1 CLBMON-9 Kinbasket Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis

The objective of this program was to evaluate plant survival and monitor planting sites under various revegetation treatments in the Kinbasket Reservoir. This monitoring program was initiated in 2008 and was to be carried out every other year over ten years.

A TOR resubmission to extend the monitor annually to 2026 was submitted to the Comptroller in February 2021 following on discussion of monitor results at the virtual Revegetation Technical Forum held in May 2020. The focus of monitoring for this period will be on post-surcharge effects on physical works and revegetation, documenting initial erosion from wind and wave action and damage to vegetation from wood debris floated and redeposited by reservoir operations. Longer term monitoring will track vegetation recovery or future additional effects from reservoir operations.

The Year 11 (2021) report is currently under review and will be submitted with the 2023 Annual Report. The report is the first year under the TOR resubmission.

5.2 CLBMON-10 Kinbasket Reservoir Inventory of Vegetation Resources

The primary objective of this study is to provide information on how vegetation communities at the landscape scale respond to long-term variation in water levels, and whether changes to the reservoir's operating regime may be required to maintain or enhance existing shoreline vegetation and associated ecosystems.

Results were presented in a virtual Revegetation Technical Forum held in May 2020. It was recommended that a final year of air photos be done just prior to WUPOR. TOR will be resubmitted to accommodate that work.

5.3 CLBMON-11A Wildlife Effectiveness Monitoring of Revegetation in Kinbasket Reservoir

The principal objective of CLBMON-11A is to assess the effectiveness of revegetation efforts (conducted under CLBWORKS-1) at improving habitat for wildlife in the drawdown zone of Kinbasket Reservoir. This monitoring program was initiated in 2008 and will be carried out periodically over ten years.

This study is complete. Results were presented in a virtual Revegetation Technical Forum held in May 2020.

5.4 CLBMON-11B Wildlife Effectiveness Monitoring of Revegetation and Wildlife Physical Works in the Arrow Lakes Reservoir

The objective of CLBMON-11B is to assess the effectiveness of the revegetation efforts (conducted under CLBWORKS-2) at benefiting wildlife use of the drawdown zone of Arrow Lakes Reservoir. A second objective of this project is to assess the effectiveness of the wildlife physical works projects (conducted under CLBWORKS-30A and 30B) at improving conditions for nesting and migratory birds and wildlife in the drawdown zone of Arrow Lakes Reservoir.

This program was initiated in 2009 and is implemented as five components: 11B1, 11B2, 11B3, 11B4 and 11B5 (see details below). These components are separated below for readability in this Annual Report.

CLBMON-11B1 (Wildlife Effectiveness Monitoring and Enhancement Area Identification for the Lower and Mid-Arrow Lakes Reservoir)

The objective of this project component is to assess the effectiveness of the revegetation program in increasing wildlife utilization of the drawdown zone and to assess the effectiveness of wildlife physical works projects at improving conditions for nesting and migratory birds and wildlife in the drawdown zone of Arrow Lakes Reservoir. The only project to proceed to implementation is the Burton wetland project (CLBWORKS-30B). Phase 1 was constructed in 2019 and Phase 2 was completed in 2021. Remaining 11B1 TOR funds provide wildlife effectiveness monitoring of the ponds, landforms and revegetation of the Burton site from 2021 to 2023 with final reporting in 2024.

Attached is the Year 11 (2020 field season) dated April 13, 2021. The Year 12 2021 field season report is in draft and will be submitted with the 2023 Annual Report.

CLBMON-11B2 (Arrow Lakes Reservoir: Revelstoke Reach Spring Songbird Effectiveness Monitoring)

The objective of this project component was to assess the effectiveness of physical works in Revelstoke Reach with respect to spring migrant songbirds over a nine-year period (2009-2017). Effects of the revegetation physical works on songbird abundance were limited by poor survival of planted stakes. In treatments with surviving stakes, however, young trees and shrubs have grown from these and it is expected that bird use will increase as these trees and shrubs mature.

The comprehensive report for CLBMON-39 Arrow Lakes Reservoir: Neotropical Migrant Use of the Drawdown Zone (2020) includes program results for the nine years of the CLBMON-11B2 monitoring program.

This component of CLBMON-11B is complete.

CLBMON-11B3 (Revelstoke Reach Western Painted Turtle Monitoring Program)

The original objective of this project component was to evaluate the response of the Revelstoke Reach population of Western Painted Turtles to wildlife physical works; however, the wildlife physical works undertaken in CLBWORKS-30A were not implemented in locations that have significant Western Painted Turtle usage.

The Juvenile Western Painted Turtle monitoring and assessment was moved into CLBMON-37 Arrow Amphibians and Reptiles Life History in the fall of 2017 as the potential operational impacts are best addressed in that monitoring study.

A final trapping session was conducted in June 2018 in which transmitters on several more turtles that were tagged and tracked under CLBMON-11B3 were removed while turtles were on land to nest.

This component of CLBMON-11B is complete.

CLBMON-11B4 (Monitoring Wetland and Riparian Habitat in Revelstoke Reach in Response to Wildlife Physical Works)

The objective of this project component was to assess the effectiveness of the wildlife physical works program at improving wetland habitat conditions for nesting and migratory birds and other wildlife in the drawdown zone at Revelstoke Reach.

CLBMON-11B4 was initiated in 2010 and continued periodically until 2020.

Attached are the Year 7 (2019) report, dated August 31, 2020, and the Year 1- 8 (2010-2020) final comprehensive report dated December 17, 2021.

This component of CLBMON-11B is complete.

CLBMON-11B5 (Effectiveness Monitoring of Wildlife Enhancement Structures in Arrow Lakes Reservoir)

The objective of this project is to assess the effectiveness of wildlife enhancement structures (e.g., bird nest boxes, bat roost structures) at enhancing wildlife habitat in the drawdown zone of Arrow Reservoir.

Nest boxes were constructed under CLBWORKS-30A in Revelstoke Reach in 2013 and 2014. A few bat structures were constructed in 2018 and 2019, however, bat structure installation was not completed until spring 2021. The most recent installations were a larger bat condo and maternity roost structures installed in November 2020 and three roosting structures installed in April 2021. The monitoring program commenced in 2019 however due phased installation of bat boxes at various locations, the first full monitoring scope for all structures was 2021.

Due to the installation delays, the final monitoring year for CLBMON11B-5 is 2024. Similarly, the waterfowl nest box monitoring did not occur from 2018 to 2020. Waterfowl nest box monitoring re-commenced in 2021 and will continue to 2025 for the full five years.

Attached is the Year 4 (2020) waterfowl nest box report dated November 1, 2021. The Year 1 (2021) bat structure monitoring report is in draft and will be submitted with the 2023 Annual Report.

5.5 CLBMON-12 Arrow Lakes Reservoir Monitoring of Revegetation Efforts and Vegetation Composition Analysis

The objective of CLBMON-12 is to evaluate plant survival and monitor representative revegetation sites under the various revegetation treatments in the mid Columbia River and Arrow Lakes Reservoir. This study will also assess changes in existing vegetation communities at the site (local) level in response to the soft constraints operating regime of the Arrow Lakes Reservoir.

A TOR resubmission to extend the monitor annually to 2026 was approved in January 2021 following on discussion and presentation of monitor results at the Revegetation Technical Forum held in May 2020 to monitor revegetation in the Burton Flats wetland enhancement project (CLBWORKS-30B) with vegetation planted under the Arrow Lakes Reservoir Revegetation Program (CLBWORKS-2.)The Year 7 (2021) report is in draft and will be submitted with the 2023 Annual Report.

5.6 CLBMON-13 Inventory of Mosquito Populations in the Revelstoke Area

The objective of CLBMON-13 is to monitor the distribution and abundance of larval and adult mosquitoes in relation to physical environmental variables (elevation, temperature) and biotic variables (habitat) in the Revelstoke area.

This monitoring program was completed in 2009.

5.7 CLBMON-33 Arrow Lakes Reservoir Inventory of Vegetation Resources

The primary objective of CLBMON-33 is to monitor landscape level changes in the spatial extent, structure, and composition of vegetation communities within the 434-440 m ASL elevation band of the drawdown zone of the Arrow Lakes Reservoir.

This monitoring program was initiated in 2007 and was carried out periodically over ten years. Results were incorporated into a virtual Revegetation Technical Forum held in May 2020. It was recommended that a final year of air photos be done just prior to WUPOR. TOR will be resubmitted to accommodate that work.

5.8 CLBMON-35 Arrow Lakes and Kinbasket Reservoirs Plant Response to Inundation

This study is a comprehensive statistical analysis of successes and failures of all treated sites within both Kinbasket and Arrow Lakes Reservoirs based on the data and results from each of CLBMON-9, CLBMON-10, CLBMON-12, CLBMON-33, CLBWORKS-1, and CLBWORKS-2.

This project is complete.

5.9 CLBMON-57 Plant Communities

The objective of CLBMON-57 is to augment CLBMON-10 Kinbasket Reservoir Inventory of Vegetation Resources to quantify the landscape-level responses of existing riparian and wetland vegetation communities within the drawdown zone to the operating regime of the Kinbasket Reservoir and to identify any effects of Mica Generating Unit 5 on drawdown vegetation.

This project is complete.

6 Status of Physical Works

6.1 CLBWORKS-1 Kinbasket Reservoir Revegetation Program Physical Works

The objective of this project was to enhance suitable vegetation growth within the drawdown zone of Kinbasket Reservoir to benefit fish, wildlife, aesthetics, dust control and recreation. During the Revegetation Technical Review in December 2014, the technical committee concluded that woody debris accumulation in Kinbasket Reservoir is a major limiting factor in revegetation success. The outcome of the review was to pilot an approach to revegetation using existing woody debris and soil to create mounds for vegetation colonization.

The reservoir levels reached 20 cm above full pool in 2020, so are continuing to assess the effect of these reservoir operations through 2025 on the physical works, including survival and regrowth of planted vegetation, under CLBMON-09. We will consider future work under CLBWORKS-1 if warranted from the monitoring results.

6.2 CLBWORKS-2 Arrow Lakes Reservoir Revegetation Program Physical Works

The objective of this project was to enhance suitable vegetation growth within the drawdown zone of the mid-Columbia River and Arrow Lakes Reservoir to benefit fish, wildlife, aesthetics, dust control and recreation.

These physical works were initiated in 2007 and planting was carried out over the first five years of the WUP. The remaining work pertains to revegetation associated with the implementation of the Wildlife Physical Works in the Lower Arrow Reservoir – Burton Wetland (CLBWORKS-30B).

Implementation of Phase one of the construction of the Burton Wetland was completed in 2019, which included revegetation of mounds and disturbed areas, see planting report under CLBWORKS-30B

<https://www.bchydro.com/content/dam/BCHydro/customer-portal/documents/corporate/environment-sustainability/water-use-planning/southern-interior/clbworks-30b-yr1-2020-03-06.pdf>.

Phase two, the final phase of revegetation was completed in 2021. The planting report is in draft under CLBWORKS-30B and will be provided in the 2023 Annual Report.

7 Monitoring Programs and Physical Works Costs

The following table summarizes the Kinbasket and Arrow Reservoir Revegetation Management Plan WUP monitoring programs and physical works costs approved by the Comptroller and the Actual Costs to January 31, 2022.

Table 7-1: Kinbasket and Arrow Reservoir Revegetation 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
CLB MP2 Kin & Arrow Reveg Annual Report	\$18,280	\$12,252	\$4,667	\$16,918	\$1,362		
C02M09A KIN: Revegetation	\$1,337,554	\$933,024	\$345,834	\$1,278,858	\$58,696	Efficiencies found during project implementation	
C02M09A KIN: Revegetation - OR DM	\$168,865	\$112,433	\$15,814	\$128,247	\$40,618		
C02M09A KIN: Revegetation - OR Imp	\$1,168,689	\$820,591	\$330,020	\$1,150,611	\$18,078		
C02M10A KIN: Inv of Veg	\$1,320,912	\$1,301,635	\$266,312	\$1,567,947	(\$247,035)	Final air photo year to monitor pre-WUPOR	TOR to be submitted in 2022 for 2023 work
C02M10A KIN: Inv of Veg - OR DM	\$97,315	\$90,520	\$16,312	\$106,831	(\$9,516)		
C02M10A KIN: Inv of Veg - OR Imp	\$1,223,597	\$1,211,115	\$250,000	\$1,461,115	(\$237,518)		
C02M11A KIN: Wild Eff	\$1,902,956	\$1,849,555	\$3,897	\$1,853,452	\$49,504	Project Complete	
C02M11A KIN: Wild Eff - OR DM	\$124,636	\$115,260	\$3,897	\$119,157	\$5,479		
C02M11A KIN: Wild Eff - OR Imp	\$1,778,320	\$1,734,295		\$1,734,295	\$44,025		
C02M11B ARROW: Reveg & Wild	\$4,718,041	\$4,134,363	\$544,468	\$4,678,832	\$39,209	Efficiencies found during project implementation	
C02M11B ARROW: Reveg & Wild - OR DM	\$281,674	\$347,430	\$48,338	\$395,769	(\$114,095)		
C02M11B ARROW: Reveg & Wild - OR Imp	\$4,436,367	\$3,786,933	\$496,130	\$4,283,063	\$153,304		
C02M12A Arr Rev&Comp - ONR	\$83,718	\$80,844	\$2,874	\$83,718	(\$0)		
C02M12A Arr Rev&Comp - ONR DM							
C02M12A Arr Rev&Comp - ONR Imp	\$83,718	\$80,844	\$2,874	\$83,718			
C02M12A Arr Rev&Comp - OR	\$1,022,651	\$709,385	\$293,373	\$1,002,759	\$19,892		
C02M12A Arr Rev&Comp - OR DM	\$163,767	\$102,549	\$57,652	\$160,201	\$3,566		
C02M12A Arr Rev&Comp - OR Imp	\$858,884	\$606,836	\$235,722	\$842,557	\$16,327		
C02M13A MID COL Mosquito Pop	\$111,650	\$88,679	\$4,062	\$92,741	\$18,909		
C02M13A MID COL Mosquito Pop - OR DM	\$26,962	\$27,406	\$4,062	\$31,468	(\$4,506)		
C02M13A MID COL Mosquito Pop - OR Imp	\$84,688	\$61,273		\$61,273	\$23,415		
C02M33A ARROW: Veg Inventory - ONR	\$41,154	\$39,218	\$1,936	\$41,154	(\$0)		
C02M33A ARROW: Veg Inventory - ONR DM							
C02M33A ARROW: Veg Inventory - ONR Imp	\$41,154	\$39,218	\$1,936	\$41,154			
C02M33A ARROW: Veg Inventory - OR	\$1,437,358	\$1,416,883	\$229,765	\$1,646,648	(\$209,290)	Final air photo year to monitor pre-WUPOR	TOR to be submitted in 2022 for 2023 work
C02M33A ARROW: Veg Inventory - OR DM	\$89,191	\$101,785	\$16,015	\$117,800	(\$28,609)		
C02M33A ARROW: Veg Inventory - OR Imp	\$1,348,167	\$1,315,098	\$213,750	\$1,528,848	(\$180,681)		
C02M35A ARROW: Plant Respons	\$297,322	\$259,274	\$3,489	\$262,763	\$34,559	Project Complete	
C02M35A ARROW: Plant Respons - OR DM	\$73,186	\$80,511	\$3,489	\$84,000	(\$10,814)		
C02M35A ARROW: Plant Respons - OR Imp	\$224,136	\$178,763		\$178,763	\$45,373		
C02M57A ARROW Plant Com	\$248,992	\$224,738	\$3,489	\$228,227	\$20,765	Project Complete	
C02M57A ARROW Plant Com - ONR DM	\$24,675	\$15,225	\$3,489	\$18,714	\$5,961		
C02M57A ARROW Plant Com - ONR Imp	\$224,317	\$209,513		\$209,513	\$14,804		
C02W01A KIN Reveg 1800 1500	\$2,668,277	\$1,973,976	\$3,975	\$1,977,951	\$690,326		
C02W01A KIN Reveg 1800 1500 - OR DM	\$198,883	\$188,418	\$3,975	\$192,392	\$6,491		
C02W01A KIN Reveg 1800 1500 - OR Imp	\$2,469,394	\$1,785,559		\$1,785,559	\$683,835		
C02W02A MCR & ARR Reveg P1	\$142,450	\$137,092		\$137,092	\$5,358	Project Complete	
C02W02A MCR & ARR Reveg P1 - OR DM	\$37,732	\$35,692		\$35,692	\$2,040		
C02W02A MCR & ARR Reveg P1 - OR Imp	\$104,718	\$101,400		\$101,400	\$3,318		
C02W02B MCR & ARR Reveg P2	\$1,636,415	\$1,638,480		\$1,638,480	(\$2,065)	Project Complete	
C02W02B MCR & ARR Reveg P2 - OR DM	\$46,846	\$40,955		\$40,955	\$5,891		
C02W02B MCR & ARR Reveg P2 - OR Imp	\$1,589,569	\$1,595,460		\$1,595,460	(\$5,891)		
C02W02C MCR & ARR Reveg P3	\$440,867	\$388,666		\$388,666	\$52,201	Project Complete	
C02W02C MCR & ARR Reveg P3 - OR DM	\$19,078	\$21,224		\$21,224	(\$2,146)		
C02W02C MCR & ARR Reveg P3 - OR Imp	\$421,789	\$367,442		\$367,442	\$54,347		
C02W02D MCR & ARR Reveg P4	\$133,058	\$76,315	\$10,000	\$86,315	\$46,743	Project Complete	
C02W02D MCR & ARR Reveg P4 - OR DM	\$13,186	\$7,737	\$10,000	\$17,737	(\$4,551)		
C02W02D MCR & ARR Reveg P4 - OR Imp	\$119,872	\$68,578		\$68,578	\$51,294		

OR - Ordered Remissible
ONR - Ordered Non-Remissible

* Red values in parentheses denote overage.