



Project O – Background and Revisions

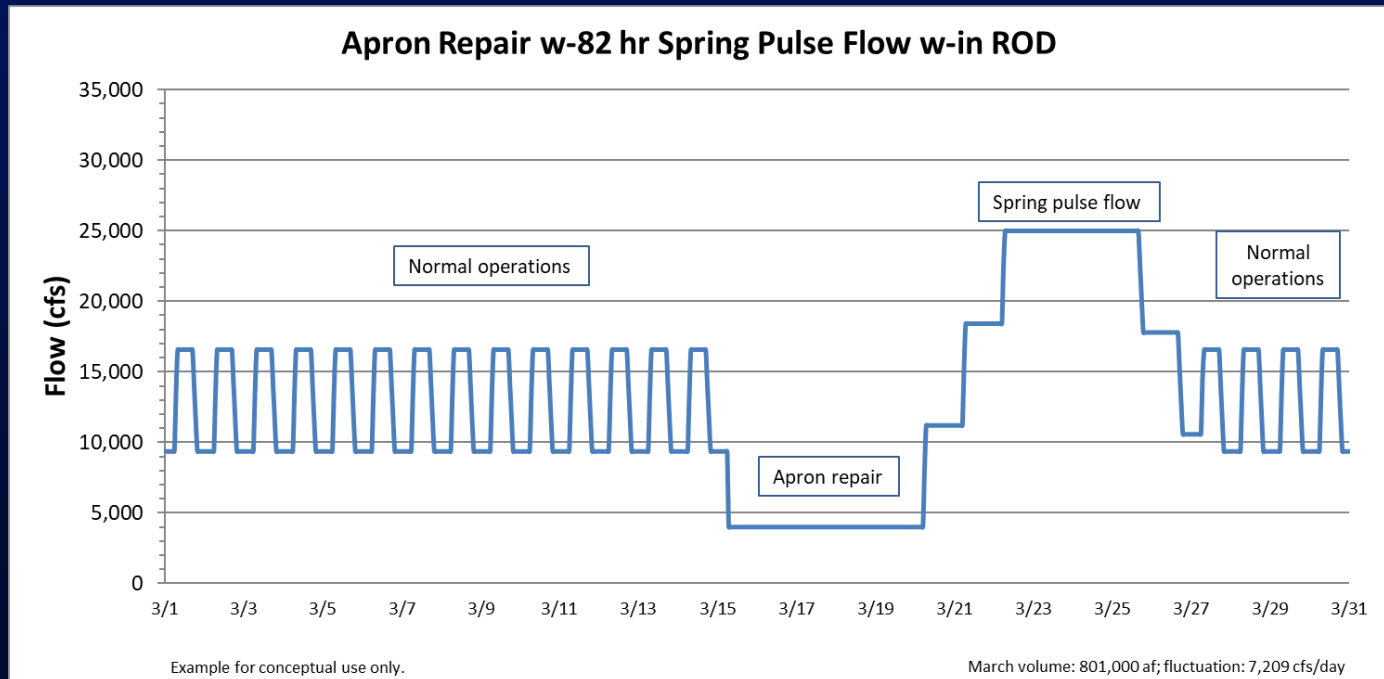
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Grand Canyon Monitoring and Research Center
Southwest Biological Science Center

Adaptive Management Work Group Meeting
November 17, 2020

Project O - Background

Review of Triennial Work Plan (TWP) during June TWG meeting resulted in recommendation to add a project to address a potential spring disturbance flow being developed by the Flow Ad Hoc Group (FLAHG)



Project O – Background, cont.

- A new project, Project O, was developed by GCMRC between the June TWG meeting and the August AMWG meeting
- August version of TWP included new Project O designed to monitor and report on a potential spring disturbance flow

Project O - August AMWG

- Evaluation of TWP during August AMWG meeting resulted in recommendation to remove Project O and submit as stand-alone proposal funded primarily under the Experimental Fund
- Early version of Project O was to be revised and submitted ahead of October TWG meeting for review and approval
- Following AMWG, review comments on Project O were requested from stakeholders by mid-September which was later extended to September 25, 2020

Project O - Revision

- Throughout September 2020 GCMRC Project O PIs:
 - Convened and participated in internal and external meetings to review and discuss comments and revisions to Project O
 - Prepared written responses to stakeholder comments
 - Revised Project O

Project O - Revision continued

- Document of aggregated stakeholder comments with GCMRC written responses to comments was sent back to stakeholders on October 5, 2020
- Revised Project O was sent to TWG for review on October 7, 2020

Project O - BAHG Review

- BAHG held 3 meetings; September 21 and 24, and October 8, 2020 to review Project O
- The outcome of these meetings included the following recommended changes:
 1. A prioritization of Project O elements based on resource and budget considerations, and
 2. Identification of funding sources for Project O elements by year

Project O - Major Changes

- In response to AMWG motion, stakeholder comments, and BAHG recommendations GCMRC made the following changes:
 1. Modified wording in the introductory material and budget request
 2. Change in funding request from 3 years to 2 years
 3. Change in funding source request

Project O – October TWG

- Review of Project O during TWG meeting on October 14, 2020 resulted in a motion that recommended additional changes to Project O including:
 1. Changes to funding requests
 2. Change to project timeframe from fiscal years to generic Year 1 and Year 2
- GCMRC made the recommended changes and a revised version of Project O were sent to Reclamation on October 29, 2020

Project O Budget Requests* – Year 1

Project O Is Timing Really Everything? Evaluating Resource Response to Spring Disturbance Flows	Year 1							Total	Funding Source
	Salaries	Travel & Training	Operating Expenses	Logistics Expenses	Cooperative Agreements	To other USGS Centers	Burden		
							14.00%		
O.1. Does disturbance timing affect food base response?	\$54,183	\$13,000	\$1,000	\$5,000	\$0	\$12,000	\$10,246	\$95,429	Reclamation C.5
O.2. Bank erosion, bed sedimentation, and channel change in western Grand Canyon	\$6,835	\$2,000	\$3,000	\$29,687	\$13,875	\$0	\$6,229	\$61,626	Reclamation C.5
O.3. Aeolian response to a spring pulse flow	\$0	\$1,000	\$10,000	\$0	\$0	\$0	\$1,540	\$12,540	Reclamation C.5
O.4. Riparian vegetation physiological response	\$6,512	\$350	\$7,500	\$3,000	\$0	\$0	\$2,431	\$19,792	Reclamation C.5
O.5. Mapping aquatic vegetation response to a spring pulse flow	\$1,709	\$375	\$9,000	\$8,067	\$20,000	\$0	\$3,281	\$42,432	Reclamation C.5
O.6. Brown trout early life stage response to a spring pulse flow	\$9,373	\$10,850	\$0	\$32,151	\$0	\$0	\$7,332	\$59,707	Reclamation C.5
O.7. Native fish movement in response to a spring pulse flow	\$0	\$250	\$9,900	\$23,073	\$10,000	\$0	\$4,951	\$48,174	Reclamation C.5
O.8. Do disturbance flows significantly impact recreational experience?	\$0	\$0	\$0	\$0	\$10,000	\$0	\$300	\$10,300	Reclamation C.5
O.9. Are there opportunities to meet hydropower and energy goals with spring disturbance flows? (funded in N.1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	GCMRC N.1
O.10. Sandbar and campsite response to spring disturbance flow (funded in B.1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	GCMRC B.1
Total Experimental Management Fund (C.5)	\$78,612	\$27,825	\$40,400	\$100,978	\$53,875	\$12,000	\$36,310	\$350,000	
O.11. Decision analysis	\$11,075	\$0	\$0	\$0	\$0	\$27,930	\$1,550	\$40,555	TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations
TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations	\$11,075	\$0	\$0	\$0	\$0	\$27,930	\$1,550	\$40,555	



(*All estimates are provisional, subject to revision)

November 17, 2020

Project O Budget Requests* – Year 2

Project O Is Timing Really Everything? Evaluating Resource Response to Spring Disturbance Flows	Year 2							Total	Funding Source
	Salaries	Travel & Training	Operating Expenses	Logistics Expenses	Cooperative Agreements	To other USGS Centers	Burden		
							22.00%		
O.1. Does disturbance timing affect food base response?	\$110,297	\$0	\$0	\$0	\$0	\$12,000	\$24,265	\$146,563	TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations
O.2. Bank erosion, bed sedimentation, and channel change in western Grand Canyon	\$109,400	\$1,500	\$0	\$0	\$25,885	\$0	\$25,175	\$161,959	TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations
O.3. Aeolian response to a spring pulse flow	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.4. Riparian vegetation physiological response	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.5. Mapping aquatic vegetation response to a spring pulse flow	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.6. Brown trout early life stage response to a spring pulse flow	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.7. Native fish movement in response to a spring pulse flow	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.8. Do disturbance flows significantly impact recreational experience?	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	NA
O.9. Are there opportunities to meet hydropower and energy goals with spring disturbance flows? (funded in N.1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	GCMRC N.1
O.10. Sandbar and campsite response to spring disturbance flow (funded in B.1)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	GCMRC B.1
O.11. Decision analysis	\$11,296	\$10,500	\$5,000	\$0	\$0	\$28,667	\$5,895	\$61,359	TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations
TWP carryover from previous years, or through annual review of the TWP, or through other Reclamation considerations	\$230,993	\$12,000	\$5,000	\$0	\$25,885	\$40,667	\$55,335	\$369,881	



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November 17, 2020



Questions?

November 17, 2020