

**GVIC FISHSCREEN/PASSAGE
OPERATION AND MAINTENANCE REPORT**

COLORADO RIVER RECOVERY PROGRAM
FY 2021 ANNUAL PROJECT REPORT

RECOVERY PROGRAM
PROJECT NUMBER C-29

I. Project Title: Operation and Maintenance of the Fish Screen and Fish Passage Facility at the Grand Valley Irrigation Company Diversion in Palisade Colorado.

II. Bureau of Reclamation Agreement Number: 01-WC-40-7050
Project: Start date: 04/01/2002
End date: Ongoing
Reporting period end date: 09/30/2021
Is this the final report? Yes No

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IV. Project Summary:
The Grand Valley Irrigation Company (GVIC) diversion is located on the Colorado River (River) near Palisade Colorado and diverts water in the GVIC Mainline Canal. A fish passage structure was constructed in the River on the downstream side of and adjacent to GVIC's diversion structure in 1998-1999 during the off water season. The fish screen was constructed in the GVIC canal below the river diversion gates in 2002. This fish passage and fish screen is owned by the Bureau of Reclamation. GVIC operates and maintains the fish screen and the fish passage through a cooperative agreement with the United States.

V. Study Schedule:
GVIC makes every effort to operate the fish screen and passage whenever diverting water into the GVIC canal from the Colorado River and adequate supply allows for GVIC's decreed diversion amount and needed fish screen by-pass pipe flows. Maintenance of the fish screen/passage is performed following the US Fish and Wildlife Service (FWS), the Bureau of Reclamation (BOR) and GVIC completing an annual inspection and submittal and approval of an Annual Work Plan by GVIC.

VI. Relationship to RIPRAP:
Colorado River – II. B.1.a. (4) Operate and maintain fish passage at GVIC
Colorado River – II.B.1.b. (3) Operate and maintain fish screen at GVIC

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VII. Accomplishments of FY 2021 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

1. Low river year caused for increased Obermeyer Gate up time and Fishscreen inoperable time due to OMID checking back for GVIC diversion

The following maintenance and activities were completed on the fish GVIC/screen/passage

October, 2020

1. October 13, 2020, Air compressor Service work on Sullair Air Compressor Fishscreen
2. October 19, 2020 Brusharm #2 trolley failed. Raised screens, fishscreens inoperable
3. October 20, 2020 Marty inspected #2 brusharm for damage to trolley. Steel particles evident, need to adjust wheels on trolley.
4. October 21, 2020, Charlie, research new brushes for brusharms. Ordered 2 sets of brushes. Researched trolley purchased back in 2017.
5. October 22, 2020, Marty, adjusted trolleys on brusharms #2 to center of I beam, ran brusharms. Lowered screens. Fishscreens operable 10:00 AM
6. October 26, 2020, Drained filters on fishpassage Obermeyer gate air compressor. Lowered Obemeyer gate, fishscreen operable.
7. October 28, 2020, Vickie raised fishcreens, excessive mud in river. Fishscreens inoperable.
8. October 29, 2020 Irrigation shutdown, raised screens.

November, 2020

1. Charlie, worked on annual O + M report for FY20 Submitted November 10, 2020

December, 2020

1. No activity.

January, 2021

1. No activity.

February, 2021

1. No activity.

March, 2021

1. March 16, 2021, Applegate Diversion Dam modification work.
2. March 20, 2021, Replace 5 brushes on the brusharms.
3. March 22, 2021, Meet ACS at Fish passage air compressor, ACS serviced and replaced filters and Gauges.
4. March 26, 2021, Install 6th brush, tap for bolts, replaced grease certs on trolleys.
5. March 31, 2021, ACS maintenance on fishscreen air compressor, oil, filters, separators, tested.

April, 2021

1. April 02, 2021, complete grease cert retro fit on brusharm trolleys. Inspect screens and lowered for startup. Test run on brusharms.
2. April 05, 2021, GVIC starts water. Fishscreen operable, Obermeyer down, Fishpassage operable. Cameo gauge at 1700cfs
3. April 10, 2021, Obermeyer gate up April Hole, Fishpassage inoperable. Camo gauge 1700cfs.
4. April 11, 2021, Raised screens, low river OMID checking back. Cameo 1670 cfs.
5. Worked on FY 22 Budget.
6. April 19, 2021, Lowered Obermeyer, Fishpassage operable, Cameo 2020 cfs.

May, 2021

1. May 18, 2021 GVIC – BOR meeting on Fishscreen retrofit.

June, 2021

1. June 4, 2021, short meet with Frederick BOR.

July, 2021

1. July 05, 2021, Obermeyer up, OMID checking back, Cameo gauge 2060 cfs 6:00 PM Fishpassage inoperable.
2. July 09, 2021, Raised screens, OMID checking back Cameo 2100 cfs, Fishscreen inoperable.

August, 2021

1. August 27, 2021 GVIC meet with BOR on Fishscreen retrofit.

September, 2021

1. September 29, 2021, GVIC meet with BOR for HYDROLOX screen presentation.

October, 2021

1. October 29, 2021, washed behind Obermeyer gate area prior to lowering gate, Fishpassage operable.
5. October 29, 2021 GVIC turns water off for 2021 season.

END 2021 Operating Season

VIII.

The fish screen was operated during the following periods: Not based on Fiscal Year

FISHSCREEN OPERATIONS – 2021 On-Off

Lowered On Date/Time	Raised Off Date/Time	Operable Days On	Inoperable Days Off	Shutdown Reason
04/05/21	04/11/21	6	8	Low river April Hole OMID checking back
04/19/21	07/02/21	14	180	Low river OMID checking back
10/29/21				GVIC Turnoff 10/29/21
TOTAL RUN	208 DAYS	20	188	
Percentages		9.6%	90.4%	


Lowered=Operable
 Raised=Inoperable

XI. Recommendations:

1. Sand blast and replace hot galvanizing on screen and baffle slots below water surface.
2. Continue evaluating replacing of some wedgewire screens with travelling screens. Price, engineering, operations, installing, etc.
3. Video camera by-pass pipeline, have had no internal inspection on by-pass pipe since 2002.
4. Place concrete raise on diversion to allow screens to perform during lower water in river through assistance from Applegate Group.

Non GVIC fish screen/passage recommendation:

New Colorado River gauging station at end of 15 mile reach upstream of the confluence of the Gunnison River. To reflect return flows from the Grand Valley within the 15 mile reach.

XII. Signed:  11/19/21
Charles D. Guenther
Assistant Superintendent
GVIC
Date

GVIC DIVERSION



JULY 05, 2021

GVIC DIVERSION



JULY 05, 2021