

NEVADA DEPARTMENT OF WILDLIFE  
STATEWIDE FISHERIES MANAGEMENT



FEDERAL AID JOB PROGRESS REPORTS

F-20-50  
2014

DUFURRENA PONDS  
WESTERN REGION



**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION  
JOB PROGRESS REPORT**

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**NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION  
ANNUAL PROGRESS REPORT**

**State:** *Nevada*  
**Project Title:** *Statewide Fisheries Program*  
**Job Title:** *Dufurrena Ponds*  
**Period Covered:** *January 1, 2014 through December 31, 2014*

**SUMMARY**

Dufurrena Ponds were included in the Nevada Department of Wildlife's (NDOW) work program for the first time in 2014. Historically, NDOW has managed Dufurrena Ponds "as needed."

An angler drop-box was installed at Dufurrena Ponds in 2014 to start gathering angler use data and success. Coordination occurred with staff at the Sheldon National Wildlife Refuge for ponds to be managed more consistently. Only angler use data has been collected since 1980 through the Mail-in Angler Questionnaire Survey.

**BACKGROUND**

Dufurrena Ponds are located on the Sheldon National Wildlife Refuge approximately 130 miles northwest of Winnemucca, NV. There are nine ponds in the complex; however, ponds 19 and 20 have the primary fisheries. The ponds were originally built to deliver irrigation water to agricultural lands in Virgin Valley, but no longer. USFWS owns the ponds and maintains them for fish and wildlife values.

Ponds vary in size and depth with Pond 20 being the largest at 50 surface acres and a maximum depth of 14 ft. This pond has produced the most consistent fishing use and best results of all the ponds. Fish species in Ponds 19 and 20 include largemouth bass, yellow perch, bluegill, crappie, redear sunfish, and green sunfish. Dufurrena Ponds is managed as a general warm water fishery. The state record yellow perch of 1-lb 8-oz was caught from Dufurrena Ponds.

**OBJECTIVES**

General Management Objectives:

- Conduct a general fisheries assessment through opportunistic angler contacts and mail-in angler questionnaire data.
- Obtain a special use permit or a cooperative agreement with the Sheldon National Wildlife Refuge to monitor fish populations by conducting two net-nights of gill netting, two net-nights of frame netting, and three beach seining transects.

## PROCEDURES

**Conduct a general fisheries assessment through opportunistic angler contacts, and mail-in angler questionnaire data.** Opportunistic angler contacts were made in 2014. Mail-in angler question data was received for 2013. An angler drop-box was installed and angler surveys were collected in 2014.

**Obtain a special use permit or a cooperative agreement with the Sheldon National Wildlife Refuge to monitor the populations of fish species by conducting two net-nights of gill netting, two net-nights of frame netting, and three beach seining transects.** A special use permit was obtained from the USFWS to conduct monitoring surveys in Ponds 19 and 20, however, no surveys or sampling took place due to the extensive amount of aquatic vegetation present.

## FINDINGS

### General Management Objective

**Conduct a general fisheries assessment through opportunistic angler contacts, and mail-in angler questionnaire data.** Angler surveys occurred during May and June. Four anglers caught 17 largemouth bass, 15 yellow perch, 3 crappie, and 2 bluegill. Length frequency of each species is provided in Table 1.

**Table 1.** Length Frequency and Species Composition Opportunistic Surveys 2014.

Species	# Caught	Size Class						
		<6"	6-7.9"	8-9.9"	10-11.9"	12-13.9"	14-15.9"	>16"
Largemouth bass	17	0	2	3	10	2	0	0
Yellow perch	15	0	10	3	2	0	0	1
Bluegill	2	1	0	0	1	1	0	0
Crappie	3	2	1	0	0	0	0	0

Angler success for 2013 Mail-in Angler Questionnaire Survey was 3.96 fish per day and 7.64 fish per angler, which was below the 5-year average of 4.30 fish per day and 14.03 fish per angler. Historical data is summarized in Table 2.

**Table 2.** Dufurrena Ponds Angler Questionnaire Results 2009-2013

Year	Anglers	Days	Fish	Fish/Day	Fish/Angler	Days/Angler
2009	156	747	5,518	7.39	35.37	4.79
2010	129	330	1,107	3.35	8.58	2.56
2011	40	87	197	2.26	4.92	2.17
2012	138	416	1,883	4.53	13.64	3.01
2013	78	151	598	3.96	7.64	1.93
<b>Average</b>	108.2	346.2	1,860.6	4.3	14.03	2.89

An angler drop-box was installed at Dufurrena Pond 20 in the spring of 2014. The 22 anglers who participated in the survey reported catching 58 largemouth bass, 146 yellow perch, 11 bluegill, and 26 crappie. Monthly angler use, success data, length

frequency, and species composition data from the drop-box surveys are summarized in Tables 3 and 4. The best angling was reported in July, August, and September.

**Table 3. Monthly Angler Use and Success Data – Drop Box**

Month	# of Anglers	# of Angler Hours	Angler Satisfaction			# of Fish Caught	# of Fish Harvested	Fish/Angler	Fish/Hour
			Angling Experience	Size of Fish	# of Fish				
May	1	23	2	1	1	42	0	42	1.83
June	1	1	2	2	1	0	4	0	0
July	4	9	1.5	1.75	1.75	27	18	6.75	3.0
August	8	21	1.25	1.25	1.25	83	50	10.34	3.95
September	6	28	0.83	0.66	1	86	48	14.33	3.07
October	1	2	-2	-2	-2	0	0	0	0
December	1	3	2	1	1	4	2	10	3.75
<b>Annual Summary</b>	22	87	1.08	0.81	0.71	242	122	10.43	1.95

**Table 4. Length Frequency and Species Composition Data – Drop Box**

Species	# Caught	Size Class						
		<6"	6-7.9"	8-9.9"	10-11.9"	12-13.9"	14-15.9"	>16"
Largemouth bass	58	16	5	23	12	1	1	0
Yellow perch	146	45	31	45	25	0	1	0
Bluegill	11	7	3	2	0	0	0	0
Crappie	26	13	10	3	0	0	0	0

**Obtain a special use permit or a cooperative agreement with the Sheldon National Wildlife Refuge to monitor the populations of fish species by conducting 2 net nights of gill netting, 2 net nights of frame netting, and 3 beach seining transects.** A special use permit was obtained from the Sheldon National Wildlife Refuge to conduct fish monitoring in Dufurrena Ponds. No surveys or sampling took place due to the extensive amount of aquatic vegetation present.

### MANAGEMENT REVIEW

In 2014, Dufurrena Ponds was included in the work program. Angler questionnaire data has been collected since 1980 and, in 2013, anglers caught 3.96 fish per day and 7.64 fish per angler. These measures of angler success fell below the 5-year average. Angler drop-box surveys for 2014 indicate the anglers caught 1.95 fish per hour and 10.43 fish per angler. This was the first year that angler drop-box information was gathered from anglers.

No population surveys occurred in 2014 because ponds had a large amount of aquatic vegetation during the time sampling was to be conducted. The timing of surveys and sampling will be conducted before vegetation becomes too dense to conduct proper and effective surveys.

## RECOMMENDATIONS

### General Management Objectives:

- Conduct a general fisheries assessment through opportunistic angler contacts and mail-in, angler questionnaire data.
- Obtain a special use permit or a cooperative agreement with the Sheldon National Wildlife Refuge to monitor populations of fish by conducting two net-nights of gill netting, two net-nights of frame netting, and three beach seining transects.
- Coordinate with Sheldon National Wildlife refuge staff to draft a plan to clean out and dredge ponds 19 and 20.

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