NEVADA DEPARTMENT OF WILDLIFE
STATEWIDE FISHERIES MANAGEMENT

FEDERAL AID JOB PROGRESS REPORTS

F-20-48
2012

ELKO COUNTY
SMALL LAKES AND RESERVOIRS
EASTERN REGION

NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL PROGRESS REPORT

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NEVADA DEPARTMENT OF WILDLIFE, FISHERIES DIVISION
ANNUAL PROGRESS REPORT

State: *Nevada*
Project Title: *Statewide Fisheries Program*
Job Title: *Elko County Small Lakes and Reservoirs*
Period Covered: *January 1, 2012 through December 31, 2012*

SUMMARY

For the calendar year 2012, Elko County small lakes and reservoirs received over 17,000 stocked rainbow trout. An additional 500 channel catfish were stocked into Jakes Creek Reservoir, 3,000 channel catfish into Willow Creek Reservoir, and 1,500 tiger trout into Angel Lake.

Angling was considered fair to good at most reservoirs with the exception of Jiggs Reservoir, which was dry due to future improvements to the dam and reservoir bottom. Rebuilding of the Willow Creek Reservoir fishery continued and 2012 marked the fifth consecutive year of warmwater fish augmentation. Dry Creek Reservoir has fished slowly since dewatering in 2009 and low water levels in 2012. Opportunistic angler contacts were scarce in 2012 and only 32 angler questionnaires being received at Jakes Creek Reservoir and 10 from Dry Creek Reservoir.

Jiggs Reservoir fishery enhancements were delayed due to engineering requirements and funding issues. Work completed in 2012 included contracting an engineering consultant to complete soil tests and develop a final construction plan.

The July population surveys on Willow Creek Reservoir consisted of electrofishing, gill and frame netting and a 10-hook trot line survey. All population surveys resulted in capturing 1,462 fish, comprised of 324 native suckers, 1,034 crappie, 65 Lahontan cutthroat trout, 26 channel catfish, and 13 spotted bass.

The population survey on Dry Creek Reservoir consisted of a day of hook-and-line sampling, capturing 19 smallmouth bass, 4 largemouth bass, and 1 rainbow trout. Smallmouth bass had an average size of 9.9 in, TL, largemouth bass averaged 10.4 in, TL, and the rainbow trout measured 16.3 in, TL.

BACKGROUND

Angel Lake

Angel Lake is an alpine lake located at 8,000 feet elevation that was modified to provide increased irrigation storage. It covers 13 SA and has a maximum depth of 35 ft. The lake is located 13 mi southwest of the town of Wells in the East Humboldt Range. The lake contains brook trout, rainbow trout, tiger trout, and speckled dace. is the

fishery is managed under a Put-and-Take Fisheries Management Concept, due to the limited carryover of trout and the immediate harvest of stocked trout.

Boyd Reservoir

Boyd Reservoir is located approximately 12 miles southeast of Elko. This reservoir is used primarily for irrigation, but it is capable of a limited trout fishery. There is currently no minimum pool agreement in place. A total loss of fish in the reservoir occurred in 1992 when it was drained. Largemouth bass have been stocked several times since then, but no survey has occurred to evaluate these augmentations.

Carlin Pond

Designated as an urban fishery, Carlin Pond was created by overflow from the Carlin City water system. Biannual stocking provides a put-and-take trout fishery. It is unique in that it does not freeze over during the winter. However, when water temperature begins to rise in the summer, a buildup of aquatic vegetation interferes the fishing at Carlin Pond.

Dorsey Reservoir

Dorsey Reservoir is located approximately 18 miles north of Elko. The reservoir covers 20 surface acres and has a capacity depth of 24 feet. It is a privately owned irrigation storage and stock water reservoir that experiences seasonal drawdown. Shortly after spring trout stocking, the water level begins to drop and warm as the summer progresses, creating poor trout habitat. Dorsey Reservoir is managed under a Put-and-Take Fisheries Management Concept, due to the high level of trout harvest and the low carryover rate.

Dry Creek Reservoir

Dry Creek Reservoir was constructed in 1961 and sits on private property with limited public access. It was first stocked with trout in 1963 and had good fishing for a few years. Nongame fish populations rapidly increased so the reservoir and tributary streams were treated with rotenone in 1970. The reservoir was restocked with rainbow trout and it presently is stocked with catchable length rainbow trout. In 1974, smallmouth bass were introduced into the reservoir as a biological control of the reoccurring, expanding nongame fish population. Currently, smallmouth bass are self-supporting and, in addition to providing sport fishing, are controlling bridgelip sucker and dace populations. To diversify and increase angling opportunities, largemouth bass was introduced in 1994 from a bass salvage project at Wilson Sink Reservoir. A dewatering event occurred in 2009, draining the reservoir down to the minimum pool and limiting existing fish habitat. Management emphasis is to provide a recreational panfish, black bass fishery, and a put-grow-take “quality” trout fishery.

Jakes Creek Reservoir

Jakes or Boies Reservoir is located approximately 35 miles north of Wells, six miles off Highway 93. The reservoir covers 62 surface acres and has a maximum depth of 16 feet at full capacity. Jakes Creek Reservoir is managed primarily as a General Coldwater fishery and secondarily as a General Warmwater fishery. The reservoir is stocked with rainbow trout yearly, and has a self-producing population of largemouth bass. Channel catfish were introduced in 2008 to increase the fishing opportunity and provide biological control of native bridgelip sucker. As summer progresses, shoreline vegetation increases and reduces the quality of shoreline fishing, but fishing by boat can greatly increase angler success rates. Trout fishing is typically good in spring and fall, and somewhat slower in summer, although the increase in water temperature allows largemouth bass fishing to pick up. The reservoir provides a yearlong recreational opportunity, with safe, thick levels of ice occurring in most years to facilitate ice fishing.

Jiggs Reservoir

Jiggs or Zunino Reservoir is located approximately 30 miles south of Elko. The reservoir covers 45 surface acres and has a maximum depth of 10 feet at full capacity. The reservoir is limited by the amount of inflow allotted to the reservoir, which makes it very susceptible to drought events. Low water levels in winter have lead to the use of aerators during the ice up period to sustain the fishery.

The reservoir has remained dry the last several years to facilitate deepening the reservoir by 3 to 10 feet and reduce the water loss from seepage by mixing in bentonite clay along the bottom. Repairs to the dam will be done to comply with safety liabilities due to the dilapidated structure. This will improve the chance for development of a perennial pool in drought years, which benefits fish and wildlife.

Willow Creek Reservoir

Willow Creek Reservoir historically had native Lahontan cutthroat trout and nongame (Tahoe sucker, dace, and redside shiner) fisheries. Recent management emphasis has been directed toward the re-establishment of a diversified recreational fishery through augmentation with white crappie, black bass, and channel catfish.

OBJECTIVES and APPROACHES

Angel Lake

Objective: General Sport Fisheries Management

- Conduct a pre-stocking evaluation of road conditions and water quality/quantity.

- Conduct a general fisheries assessment through opportunistic angler contacts.

- Conduct a visual survey of the shoreline to evaluate over-winter mortality immediately after spring ice breakup.

- Conduct an angling survey to evaluate growth and carryover one day in early summer.

Boyd Reservoir

Objective: General Sport Fisheries Management

- Conduct a one night electroshocking survey at three predetermined transects in early summer.

Carlin Pond

Objective: General Sport Fisheries Management

- Visually assess water quantity (pond level, inflow/outflow) and quality (clarity) for coordinating trout stocking.

Dorsey Reservoir

Objective: General Sport Fisheries Management

- Conduct a pre-stocking evaluation of road conditions and water quality/quantity.

- Conduct a general fisheries assessment through opportunistic angler contacts.

Dry Creek Reservoir

Objective: General Sport Fisheries Management

- Monitor black bass size structure and abundance in the spring/early summer through a single nighttime, electroshocking survey (depending on road conditions for towing a boat), or three gill nets for one net night, and/or hook and line survey during 2 days in May.

- Conduct a general fisheries assessment through opportunistic angler contacts.

- Maintain and check return of volunteer, angler drop-box surveys during the course of other duties.

- Review and submit the 2012 Fisheries Management Prescription.

Jakes Creek Reservoir

Objective: General Sport Fisheries Management

- Conduct a pre-stocking evaluation of road conditions and water quality/quantity.

- Conduct a general fisheries assessment through opportunistic angler contacts.

- Maintain and check for returns of volunteer, angler drop-box surveys during the course of other duties.

- Augment the channel catfish population (500) in the spring.

- Conduct a single nighttime electroshocking survey at 3 established transects during the summer.

- Conduct an overnight angling survey to assess the channel catfish population in conjunction with other work activities.

Jiggs Reservoir

Objective: To evaluate the water improvements to Jiggs Reservoir and the associated fishery, following a deepening and bentonite-sealing project.

- Be on site monitoring the progress of construction during pond excavation and sealing.

- Augment the fishery with 3,000 rainbow trout, 500 largemouth bass, and 500 bluegill when the appropriate amount of water refills the reservoir (spring).

- Visually assess water quantity (inflow and reservoir level) and quality (temperature) occasionally throughout the year.

Willow Creek Reservoir

Objective: General Sport Fisheries Management

- Conduct a pre-stocking evaluation of water quality/quantity.
- Conduct a general fisheries assessment through opportunistic angler contacts.
- Stock a minimum of 4,000 channel catfish in the spring.
- Conduct a single nighttime, electroshocking survey in spring, and set experimental gill nets and frame nets for 2 net nights in the summer, depending on water conditions.
- Install a digital recording thermograph from May to October to measure temperature variations associated with fish activity including black bass and crappie spawning.
- Collect a minimum of 5 samples of each sport fish species for mercury analysis in cooperation with NDEP.

PROCEDURES

Coordinating trout stocking with the hatcheries requires visiting of the reservoir prior to stocking to evaluate water level and water temperature.

Winterkill surveys were done shortly following ice breakup. A one or two person crew walked the shoreline to document fish mortalities.

Angler creel was collected by means of personal contact or monitoring angler drop-boxes located at certain reservoirs. Information gathered included number of anglers fishing, hours fished, fish caught, fish released, and fishing method used.

Electroshocking surveys were conducted using the electroshocking barge, with the fixed probes used as the anode and the barge served as the cathode. Captured fish were measured, weighed and released.

Fish capture, salvage, augmentation and transplant of fish species was accomplished through the use of electrofishing, beach seining, angling gear, frame nets, and trawling from approved water sources of similar water quality and fish composition.

FINDINGS

Angel Lake

In June and July, 3,374 Eagle Lake strain rainbow trout and 3,275 tiger trout were stocked. An additional 1,680 Jumper strain rainbow trout were stocked in fall, but was reduced by half to minimize overwintering stress or winterkill.

Combining creel survey visits with other work duties, thirteen anglers were contacted on 3 separate days. Anglers put forth 10.5 hours to catch 17 fish, resulting in catching 1.3 fish per angler and 1.6 fish per hour. The average time it took for an angler to catch a fish was 36 min. The largest rainbow trout measured 15.2 inches (387 mm) and appeared in excellent body condition.

On May 13, ice conditions ice conditions and overwinter fish mortality were assessed. The lake was ice free and the water temperature was 42° F (5.6° C). There were two fish mortalities observed near the dam, which were presumed fishing mortalities. It was assessed that overwinter fish loss was low.

On August 30, a hook-and-line survey was conducted using two anglers fishing for 5 hours. The survey assessed pre-winter body condition of the trout. Surveyors caught 57 fish, of which 16 were rainbow trout and 26 tiger trout. Body condition for the 16 rainbow trout averaged fair, with 10 fish in poor condition (62.5%), 4 in fair condition (25%), and 2 in excellent condition (12.5%). Tiger trout ranged in size from 7.9 to 12.6 inches (200 to 320 mm), TL, averaged 10.5 inches (267.9 mm), and appeared to be in good body condition. This was the third year for collecting data on overwintering trout, with this being the first year of contacting winter carryover fish.

Boyd Reservoir

On May 29, three transects were electroshocked at Boyd Reservoir. The reservoir was approximately two feet below the spillway outflow, with very little water being released for downstream irrigation. The water temperature was 64.2°F (17.9 °C), with the survey being conducted under clear and calm conditions. The majority of the reservoir was dominated by areas of heavy aquatic vegetation that provided fish habitat.

A total of 144 fish were contacted in 17.9 minutes of electroshocking, resulting in a capture rate of 482.7 fish per electroshocking hour. Although largemouth bass made up 77.8% of the catch, compared to 21.5% bluegill, the true number of bluegill was not represented by these numbers. During the survey, many bluegill, particularly smaller age classes, were unable to be netted due to their erratic swimming behavior. All three transects were considered to have poor to fair shocking and netting efficiencies, with an estimate of only 30-40% of the contacted fish being captured. One tui chub was also contacted in the shallow, inlet portion of the reservoir.

The average size of the largemouth bass was 9.1 inches (230.9 mm) (TL), with a range of 2.8 to 16.4 inches (72 to 416 mm). A total of 27 largemouth bass were measured and weighed to assess body condition, resulting in zero bass in poor condition, 4 fish in fair condition (14.8%), 19 fish in good condition (70.4%), and 4 in excellent condition (14.8%). The average size for bluegill was 4.6 inches (118 mm), TL, with a range of 1.5 to 7.3 inches (38 to 186 mm). Bluegill appeared to be in good body condition with several larger adults appearing to be gravid.

Overall, the fishery appears to be in good condition, with bluegill and largemouth bass being successful. Native fishes were documented in much higher numbers in previous surveys, but currently appeared to be controlled successfully by sport fish. The amount of angling pressure on the reservoir appears relatively low and the fishery is not being used to its full angling potential. Low use by anglers may be partly due to the road access, which is quite rough.

Carlin Pond

A total of 2,389 rainbow trout were stocked into Carlin Pond in 2012, with 272 stocked just prior to free fishing day for a fishing clinic.

Dorsey Reservoir

Spring trout stocking consisted of 2,000 Eagle Lake strain rainbow trout in April of 2012. No anglers were contacted at Dorsey Reservoir in 2011. Due to a poor water year and irrigation requirements from the ranch, the water level reached a critically low level by June 2. It was presumed all fish died. The water level soon increased as irrigation releases dropped off.

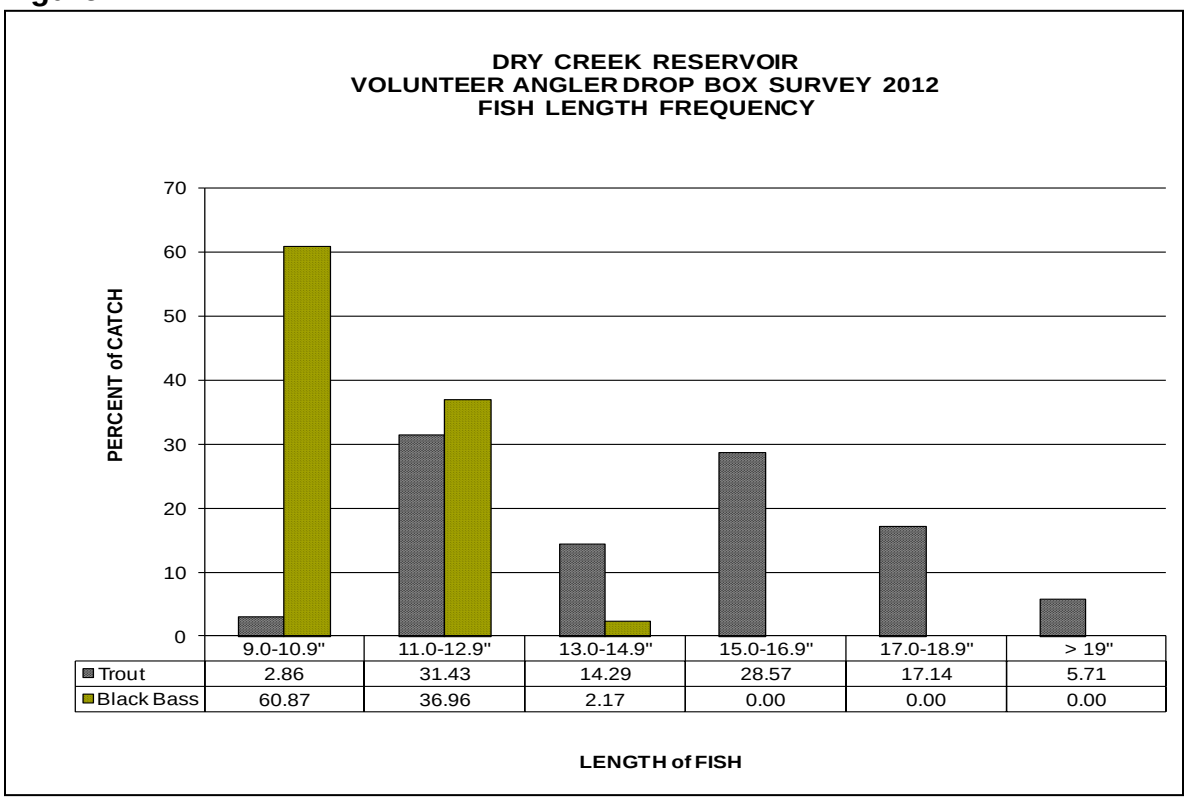
Dry Creek Reservoir

Dry Creek Reservoir was stocked with 2,012 catchable size (8.9 in, FL) rainbow trout on May 9, 2012. The volunteer Angler, Drop-Box Survey was in use for the entire season, with only ten surveys received. Anglers reported catching 36 trout and 55 bass, resulting in catch rates of 7.6 fish per angler and 1.72 fish per hour. The 2012 drop-box survey was consistent with long term average catch rates from 2005-2011, and was encouraging since 2009 there was a dewatering event and loss of angler visitation during the 2010-2011fishing seasons. Figure 1 illustrates reported fish lengths from 2012, which are consistent with previous drop-box data.

On July 24, 2012, 3 anglers fishing 4 hrs each completed a hook-and-line population survey for black bass. Surveyors caught 19 smallmouth bass, 4 largemouth bass, and 1 rainbow trout. Smallmouth bass averaged 9.9 inches, TL, and ranged in size from 6.8 to 12.4 inches, TL, while the 4 largemouth bass averaged 10. 4 inches, TL, and trout measured 16.3, FL. The 19 smallmouth bass had an average K-Factor rating of 4.28 and a body condition rating of poor. Figure 2 illustrates length to weight ratios of smallmouth bass from 2010 to 2012. Lengths were similar, but heavier fish captured in 2011 coincided with the last year Dry Creek Reservoir was at full capacity.

A Fishery Management Prescription for Dry Creek Reservoir is continuing to be revised and should be completed by 2013.

Figure 1



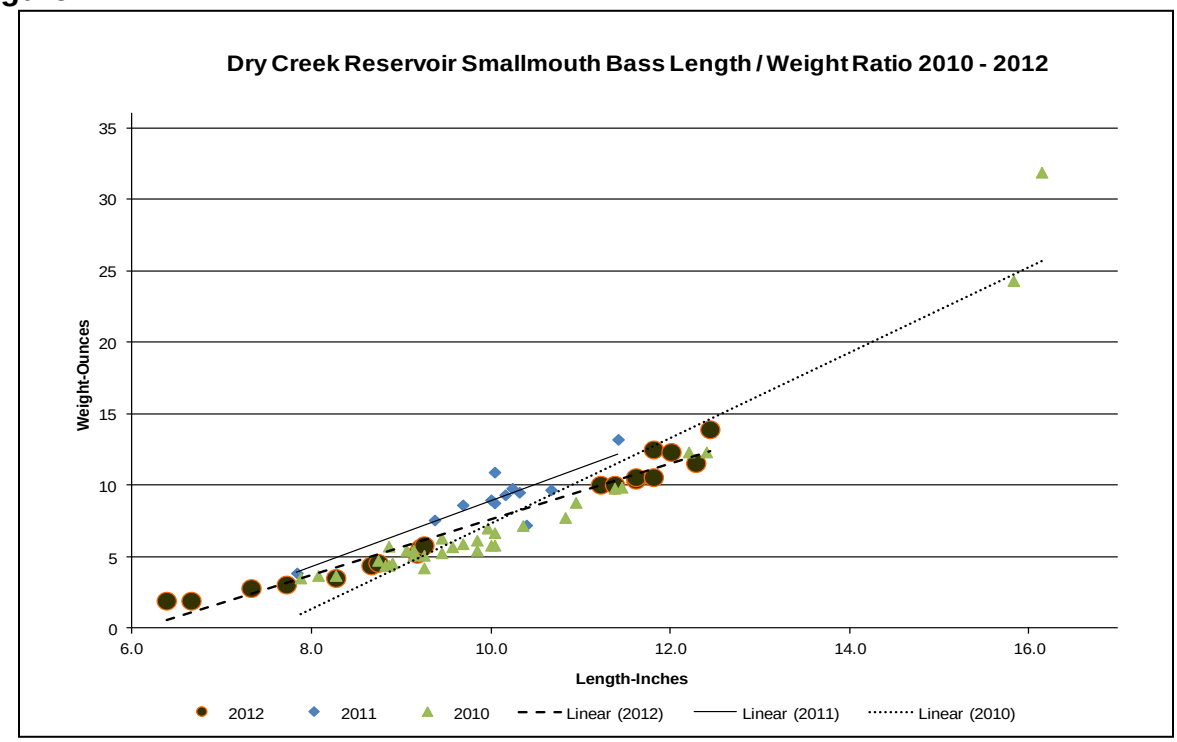
Jakes Creek Reservoir

In May, 3,075 Jumper strain rainbow trout were stocked. No trout were stocked in the fall due to a low water level. For the fifth consecutive year, 500 channel catfish, ranging in size from 6 to 8 in, were stocked into the reservoir.

During four visits to the reservoir, two anglers were contacted. These anglers put forth 4 hrs of angling to capture 7 fish, resulting in success rates of 3.5 fish per angler, 1.75 fish per hr, and 0.3 hrs per fish. No anglers were observed fishing during winter while out monitoring water quality. However, auger holes were observed suggesting ice fishing.

A total of 32 angler questionnaires were received between January and August, with no rejection of questionnaires. A total of 34 anglers fished for 119.5 hrs to capture 463 fish, resulting in success rates of 13.6 fish per angler and 3.87 fish per hour. These success rates are somewhat elevated due to several anglers catching large numbers of small sized bass. In July, one 8-11 in channel catfish was also reported being caught, which was probably from a recently stocking. Catfish have been stocked in the reservoir for several years and were rarely contacted during creel, electroshocking, or gillnet surveys. Most anglers appear to target either trout or bass, based on their fishing styles, suggesting most anglers do not fish directly for catfish. A catfish specific survey is needed to assess the channel catfish population in the reservoir.

Figure 2



On July 25, with the water temperature at 72 °F (22.2 °C), a relatively clear sky, and calm to breezy wind conditions, an electrofishing survey was conducted. Due to a low water level, the east and north shores were sampled. Attempts were also made to locate trout in the middle of the reservoir. The survey lasted from 2135 hrs to 2245 hrs, but the transformer timer malfunctioned and the number of electroshocking seconds could not be documented. Extra time was given to try and locate channel catfish and trout. A total of 75 fish were captured, with hundreds of largemouth bass going un-netted. The catch was composed of 43 largemouth bass, 26 bridgelip suckers, five rainbow trout, and 1 channel catfish.

Prior to the start of the electroshocking, a hook-and-line survey was conducted, resulting in 67 captured bass in one hour of fishing for 4 samplers. These fish are included into the summary statistics for largemouth bass to increase the amount of data. Between the two sampling techniques, a total of 36 largemouth bass were weighed and measured to calculate body condition, resulting in no bass in poor condition, 1 bass in fair condition (2.8%), 12 bass in good condition (33.3%), and 23 bass in excellent condition (63.9%). The lengths of 42 bass were measured to show a range of 8.5 to 11.3 in (216 to 287 mm) (TL) and an average 9.6 inches (242.9 mm). Most contacted bass were age class +4, with less than 10 younger fish. Based on past observations, domination by single age class appears to be the trend, creating a very cyclic bass fishery.

A total of 6 rainbow trout were captured, with 4 of these being measured and weighed. These fish had body condition rating as follows; 3 fish in fair condition and one fish in good condition. The six fish ranged in size from 9.4 to 13.3 in (239 to 338

mm), TL, and averaged 11.5 in (292.8 mm). The number of contacted trout was very low for this survey and may be a product of a low water level and an elevated water temperature. There was a reported fish kill two weeks before the survey, but there was no physical evidence to support this such as visible carcasses at the time of the survey. However, a fish kill could help explain the low numbers of trout found during the survey.

Only one catfish was contacted during the survey, at 9.5 in (242 mm), TL, which made it from this year's stocking. Catfish have not been documented in the reservoir since 2010 when two were contacted during angler creel visits. In conjunction with the electrofishing survey, three anglers conducted an overnight hook-and-line survey targeting catfish. After angling for approximately 9 hrs, no catfish were contacted. However, it produced 26 bridgelip suckers that ranged in size from 5.2 to 15.5 in (132 to 394 mm), TL. All but one sucker was larger than 10 in, which also has been observed in the last several surveys. This suggests that largemouth bass and catfish are controlling sucker numbers by reducing recruitment. Future surveys will be critical in evaluating the success of using biological control to manage bridgelip sucker.

Jiggs Reservoir

Due to complications concerning construction repairs to the dam, minimal work was done to Jiggs Reservoir in 2012. Dyer Engineering Consultants were hired to complete soil testing and draw up plans for repairs to the dam and the bottom sealing project. The dam was grubbed and several test holes were dug for percolation tests. Their final report was near complete at the end of 2012. Once this final report is received, the project will go out to bid. It is anticipated that work will begin by late spring to early summer and completed by fall of 2013. Considerable time was spent on coordination and planning, but no approaches were completed.

Willow Creek Reservoir

Prior to fish stocking, visitation to the reservoir in May, June, July and August resulted in only 2 angler contacts and other angler presence (litter, fishing line, etc.). Willow Creek Reservoir was stocked with 3,000 9.5 in, TL, channel catfish on June 7, 2012.

In the night time hours of July 18, 2012, the Coffelt electrofishing barge was utilized to electrofish suitable fish habitat with the expectation of capturing spotted bass, channel catfish and white crappie. The sample area was the reservoir perimeter along suitable shoreline and across the face of the dam. Three netters and the fixed, twin anodes were used. All fish were targeted for capture to determine the success of recent stocking efforts and establishment of native fish species. Electrofisher settings and other relevant information were:

Willow Cr. Reservoir Summer Electrofishing Survey

Pulse – DC	**Pulse Width (millisec.**) - 5	**Shocking Efficiency** -Good
Volts – 480-510	**Output(amps)** - 5-6	**Time of Day** - 2100-2300
Pulse Freq. - 60	**Shocking Time (sec.)** – 1,044(=17.4 min= 0.29 Hr)	**Water Temp.(° F)** - 73

Water Conditions – Reservoir was only approximately 30% of capacity, calm, turbid, and algae minimum with limited quality/preferred fish habitat available to shock due to low water levels.

On July 18, 2012, 4 frame nets, two 150 ft long by 6 ft wide experimental mesh gill nets, and one 10 hook catfish trot line were set during late afternoon, soaked overnight, and retrieved the following morning. Gill net locations were on the southeast shoreline near the first primitive campsite and one gill net was set along the face of the dam. Frame nets were set along the north shoreline around brush piles and one frame net was set near the south end of the reservoir. The trot line was set near the back of the north cove. The nets were set for a total of 79 hrs or approximately 11.3 hrs each.

Due to very low water conditions, the majority of the reservoir perimeter was electrofished, including the remaining coves and face of the dam with good results. A total of 500 fish were shocked, captured, measured and counted in 0.29 hours of electrofishing effort. The majority of the fish contacted were white crappie and Tahoe sucker.

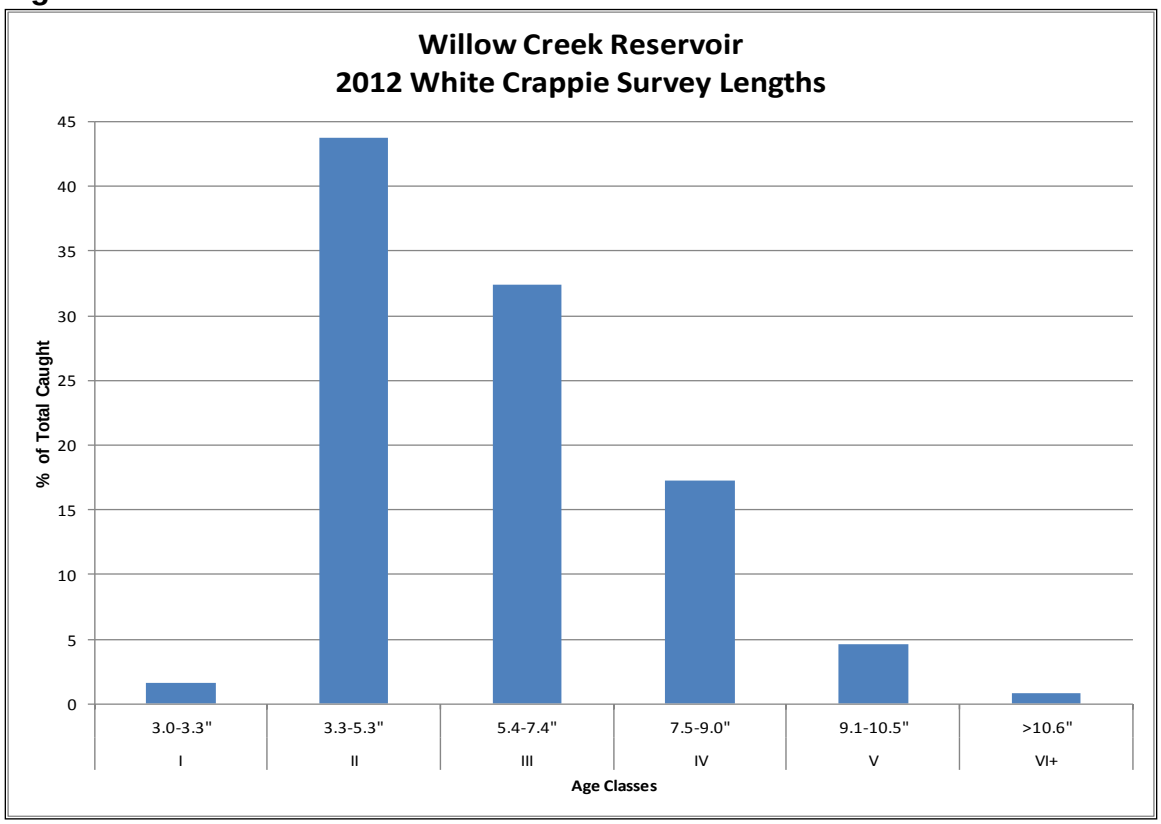
A total of 305 white crappie were captured during the electrofishing survey, significantly higher than previous sampling efforts. The size of crappie ranged from 3.2 to 10 in (TL) with an average length of 5.4 in, TL. Approximately 76% of crappie sampled were Class II and Class III (3.3 to 7.4 in, TL, Figure 3), good survey indicators of successful spawning and recruitment from the 2008 to 2010 reintroduction efforts.

A total of 12 Alabama spotted bass were also captured, ranging in size from 3.2 (Class I from a 2011 spawn) to 8.9 in, TL, for an average size of 4.8 in, TL. There were 4 Lahontan cutthroat trout caught during electrofishing that averaged 13.6 in, TL. Gill nets caught 2 channel catfish that had an average size of 11.1 in, TL. All game fish were in fair to good body condition, indicating optimal foraging conditions despite the very low water conditions.

The combination of all gill and frame net results and the 10 hook trot line produced a total of 962 fish that were captured during 79 hrs of soak time. The majority of the fish netted were white crappie (729 fish, average size 6.4 in, TL) and Tahoe sucker (147 fish). Native Lahontan cutthroat trout made a strong contribution from gill netting with 61 adult size fish captured that had an average size of 14.2 in, TL (size range 9.2 – 20.0 in, TL), most likely the result of the heavy spring runoff of 2011 (Table

1). A total of 24 channel catfish were also netted and had an average size of 11.3 in, TL (size range 8.6 – 17 in, TL).

Figure 3



The good results of both population sampling efforts in capturing 1,462 fish confirmed that Willow Creek Reservoir continues on recovering after experiencing a severe game fish winterkill/desiccation during the period of 2002-2007. The composition of the fish community is balancing-out toward a desired sport fish fisheries of white crappie (71% of all fish captured), channel catfish, cutthroat trout and black bass, while native non-game fish (Tahoe sucker, dace, and redside shiner) play a vital role in forage contribution for predacious game fish. Natural reproduction of white crappie and spotted bass continue to assist in maintaining or reducing non-game to game fish ratio and will increase the quantity and quality of game fish caught in coming years.

A digital recording thermometer was installed on May 1, 2012 to document temperature variations to predict fish activity (spawning) including black bass and crappie. The thermograph was retrieved on June 5, 2012, due to a decreasing reservoir water level to meet downstream irrigation demands. The reservoir was drawn down to approximately 10% of capacity by mid-summer before the outlet gate was shut. Because of the short seasonal duration and questionable thermograph recordings, no data was downloaded for analysis and will not be included for 2012.

MANAGEMENT REVIEW

Angel Lake

All approaches were met in 2012. Angel Lake continues to be a productive put-and-take fishery. A continued sampling effort to evaluate the carryover trout would be useful in better understanding this fishery for future management goals

Boyd Reservoir

Water levels were checked in 2012, and the electroshocking survey was conducted.

Carlin Pond

The approach was completed in 2012.

Dorsey Reservoir

The approaches were completed in 2012.

Dry Creek Reservoir

The approaches were completed in 2012.

Jakes Creek Reservoir

All approaches were completed in 2012. The reservoir continues to be a successful “general” multispecies fishery. It is too early to measure the benefits of the introduced channel catfish, which were stocked over the last five years. Future creel, gill netting, and electroshocking surveys will provide data to evaluate this specie’s contribution to the fishery.

Jiggs Reservoir

While the approaches were not completed in 2012, there was considerable time spent on coordination and planning. Although the main brunt of the project has not been initiated; soil samples, grubbing of the dam and the completion of a Cooperative Agreement with the landowner were all critical in the progress of the project. It is expected that after the completion of Dyer Engineering’s Plan completion, the project will progress as the year continues.

Table 1

WILLOW CREEK RESERVOIR
Population Sampling Catch Record - Frame/Gill Net & Electrofish Survey
2012

	Net/Sample #	Frame/Gill Nets 1-7	Electrofish 8-10		
	Date:	7/19/2012	7/18/2012		
SPECIES				**TOTALS**	**2012 % of Species Composition**
White Crappie	Number	729	305	**1,034**	
	Avg. Size (Inches-TL)	6.4	5.4	**6.1**	
	Size Range (Inches-TL)	4.1-12.2	3.2-10.0		***70.7***
Channel Catfish	Number	24	2	**26**	
	Avg. Size (Inches-TL)	11.3	11.1	**11.3**	
	Size Range (Inches-TL)	8.6-17	10.4-11.8		***1.8***
Alabama Spotted Bass	Number	1	12	**13**	
	Avg. Size (Inches-TL)	4.7	4.8	**4.8**	
	Size Range (Inches-TL)	4.7	3.2-8.9		***0.9***
Lahontan Cutthroat trout	Number	61	4	**65**	
	Avg. Size (Inches-TL)	14.2	13.6	**14.2**	
	Size Range (Inches-TL)	9.2-20.0	9.5-16.9		***4.4***
Tahoe Sucker	Number	147	177	**324**	
	Avg. Size (Inches-TL)		6.1	**6.1**	
	Size Range (Inches-TL)		4.3-12.0		***22.2***
Redside Shiner	Number	0	0	**0**	
	Avg. Size (Inches-TL)				
	Size Range (Inches-TL)				***0.0***
Speckled Dace	Number	0	0	**0**	
	Avg. Size (Inches-TL)				***0.0***
	Size Range (Inches-TL)				
	TOTAL FISH	962	500	**1,462**	
	Duration (Hours)	79.0	0.28	**79.3**	
	% Non-desirable Fish	15.3	35.4	**22.2**	
	Fish / Net-Shocking Hour	12.2	1,785.7	**18.4**	
	Avg. Res. Water Temp. (F°)	71.0	73.0		

Net/Sample Locations, Type of Trap:
1. Southeast End, in front of campsite, Gill net, 150' long, Exp. Mesh, buoy set
2. West End, Gill net 150' long Exp. Mesh, Shore line set off of Dam face.
3. North-central shoreline Brush pile, Frame net.
4. South side Frame net
5. North Side, 1st cove up from dam face, Frame net
6. North Side, 3rd cove South of Dam, Frame net
7. North Side, 3rd cove South of Dam, 10 Hook Trot Line, 2 catfish caught

8 - 10. Electrofish all suitable habitat/shoreline

Willow Creek Reservoir

All approaches except collection of mercury samples were completed in 2012. Mercury samples will be collected during sampling in 2013.

RECOMMENDATIONS

Angle Lake

- Continue to evaluate water conditions prior to hatchery trout stocking.
- Continue to conduct ocular winterkill surveys after spring ice breakup.

- Sample the lake in late summer/fall to evaluate the condition of carryover fish going into the winter ice period.

Boyd Reservoir

- Continue to monitor water conditions as it relates to the largemouth bass fishery.
- Conduct a one night electroshocking survey to assess the species composition in the reservoir, post a low water year.

Carlin Pond

- Continue to evaluate water conditions prior to hatchery trout stocking.

Cow Creek

- Conduct an ocular survey of the inlet stream to assess the potential of natural reproduction.

Dorsey Reservoir

- Continue to evaluate water conditions prior to hatchery trout stocking.

Dry Creek

- Monitor reservoir water levels and drought conditions and adjust management as necessary.
- Submit the Dry Creek Reservoir Fisheries Management Prescription for review and approval.
- Continue to maintain the volunteer angler drop-box.

Jakes Creek Reservoir

- Continue to evaluate water conditions prior to hatchery trout stocking.
- Continue to collect angler creel throughout the fishing season.
- Conduct a gill net survey to assess species composition of the reservoir fishery and assess the bridgelip sucker age class distribution.

Jiggs Reservoir

- Continue to facilitate the improvement work at the reservoir in an attempt to reduce seepage problems and repair the dam.

Willow Creek Reservoir

- Closely monitor reservoir water levels and drought conditions during the spring and summer and adjust fisheries management as necessary.
- Augment channel catfish when necessary and conditions allow and perform population survey(s) in spring/summer to document fishery composition and sport fish populations.
- Publicize and promote the rebuilding of this popular fishery and diversify angling opportunities.
- Collect a minimum of 5 samples of each sport fish species for mercury analysis in cooperation with NDEP.

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