

Tucannon Lakes Management

12/27/08

Issues

1. Dam Safety- in violaton of DOE legal requirements
2. Loss of depth and volume in lakes and consequential reduction of fish stocking
3. Thermal inputs into the Tucannon River and ESA fish habitat issues
4. Too many lakes to manage and maintain?
5. Maintenance and Operation of facilities
 - a. sceens and intakes,
 - b. dams and vegetation
 - c. footbridge at Watson Lake - maintenance
 - d. General repair/maintenance costs and man-power
6. Loss of Floodplain and constriction of the Tucannon River by lakes and dams
7. Resident trout angling and LSRCP mitigation goals (trout stocking to replace expected loss of angling days because of damming the Snake River)
8. Other resident Trout Fishing opportunities are limited (no natural lakes and only small ponds, streams no longer stocked, maintenance of the jumbo trout program)
9. Further restrictions to fishing in the Tucannon River to protect ESA listed fish likely in the near future

Opportunities

1. Repairs and restructuring could provide more fishing opportunity/recreation and more disabled access
2. Reexamine angling regulations and restrictions – could possibly relax some regulations and provide some use of float tubes, etc.
3. Could improve possibilities to fish habitat for ESA listed fish and other wildlife
 - a. Construct side channels and improve riparian vegetation
 - b. Reduce river constriction
 - c. Reduce thermal inputs from lakes
4. Reduce long term costs

A. Spring Lake

1. WDFW District Team has identified as a high priority for repair
2. Serious dam problems and this could have a catastrophic failure and severe impacts to habitat in the Tucannon River for ESA listed fish
3. very shallow and weedy now – lack of capacity
4. Angler access is limited because of weeds and overgrowth
5. Needs a bottom draw outlet and screen system to reduce thermal inputs into the river and to keep fish in the lake
6. has little constriction of the river

7. stocking plans for 2009 are for 11,000 catchables and 300 jumbos
8. 2003 estimated costs for repair: \$544,000 for full repairs and \$43,000 for decommissioning,
9. Over 8,000 angler hrs of use and 4,700 fish harvested in 2003

B. Blue Lake

1. Most dam safety issues already addressed, least cost for repairs
2. Already has a screened, bottom draw outlet
3. doesn't need to be dredged – was dredged about 8 years ago
4. Has high angler use (nearly 14,000 angler hrs in 2003, and about 12,000 fish caught)
5. this lake does not draw from the river and has no constriction of the floodplain
6. this lake is classified as a fish passage barrier by the WDFW assessment of this spring fed tributary
7. stocking plans for 2009 are for 23,300 catchables and 400 jumbos
8. 2003 estimated costs for repair: \$58,500 for dam repair

C. Rainbow Lake

1. Unique lake as its intake is included with the intake for the hatchery (and the lake acts as a reservoir for the hatchery). The intake is owned by USFWS as part of LSRCF- it is part of the hatchery facility.
2. fills in with sediment quickly because it withdraws water year round
3. largest of the 8 lakes
4. the size of the lake could be reduced and the water circulation improved during dredging (e.g. fill the sw corner and breach or remove some of the spits)
5. the sediment trap section of the lake near the inflow could be expanded
6. docks could be added for better access and improved water flow patterns
7. another, separate issue is the constraining dike along the river downstream of the intake dam. This dike directs the river to the base of the hill and reduces floodplain and maintains channelization of the river
8. this lake used to be heavily stocked, but loss of capacity and volume has caused reduced stocking – the lake must be dredged
9. Lake has high angler use (nearly 15,000 angler hrs in 2003, and about 10,000 fish caught)
10. stocking plans for 2009 are for 15,000 catchables and 300 jumbos
11. 2003 estimated costs for repair: \$858,400 and \$140,400 for decommissioning

D. Deer Lake

1. no road access for anglers- secluded
2. small, shallow and weedy lake
3. low dam?
4. Tucannon River is close by
5. outlet does not have a functioning screen

6. intake structure controls the river location and is difficult to maintain or operate
7. the dam leaks
8. could decommission and leave the intake open but there may be risks to infrastructure such as the road and old dam.
9. could decommission and block the intake, or breach, or remove the dam
10. this lake could be used to replace loss of Big 4 as a fly fishing only lake
11. beaver problems in 2008
12. Has relatively low angler use (nearly 1,100 angler hrs in 2003, and about 700 fish caught – partial survey that missed first two weeks of the season)
13. stocking plans for 2009 are for 3,300 catchables and 25 jumbos
14. 2003 estimated costs for repair: \$456,100 and \$35,400 for decommissioning

E. Watson Lake

1. This lake has lots of angler use (Easy access for the public and very popular)
2. This lake causes maintenance costs because of recent moving and rebuilding a separate access administrative road
3. This lake also requires a separate power line and maintenance costs
4. The river is channelized and has a sharp corner that is a risk to the footbridge, lake, and parking lot, and reduces floodplain (Watson and Beaver lakes severely constricts the river and floodplain)
5. leaky dam that is covered with brush and trees
6. Parking lot is dangerous to exit
7. Bridge over river requires maintenance
8. Lake is not holding enough water to exit through the outflow screen now
9. stocking plans for 2009 are for 20,000 catchables and 300 jumbos
10. 2003 estimated costs for repair: \$606,000 for repair and \$43,900 for decommissioning

F. Beaver Lake

1. This lake is very small, shallow, weedy and overgrown
2. little angler use and reduced stocking with hatchery fish
3. easy access
4. difficult to get water flow during the summer
5. could be used as a sediment trap for Watson Lake (terminate stocking?)
6. stocking plans for 2009 are for 500 catchables and 0 jumbos
7. 2003 estimated costs for repair: \$246,800 for repair and \$26,900 for decommissioning

G. Big 4 Lake

1. Unique fishing area because it is the **only fly fishing only area in SE WA**
2. it is secluded and access requires wading the river (can be difficult or dangerous in early spring during high flows)
3. dam is overgrown and leaks badly

4. this lake is difficult to stock because of no road access, and it is only stocked once per year
5. a beaver dam was blocking the outlet in 2008
6. the Tucannon River is threatening to erode the dam and capture the lake
7. the lake is shallow and needs to be dredged and it needs protection from the river
8. repairs will be expensive and difficult because there is no road access (all heavy equipment will have to cross the river)
9. stocking plans for 2009 are for 2,000 catchables and 300 jumbos
10. 2003 estimated costs for repair: \$644,700 to repair and \$123,100 for decommissioning

H. Curl Lake

1. This lake is part of the USFWS ownership and part of the LSRCP hatchery program. It is used primarily as an acclimation pond for spring Chinook and later stocked with catchable trout for fishing.
2. The lake has very easy access
3. This lake opens for fishing the last Sat. in April, after use as an acclimation pond
4. Relatively few repairs are needed
5. Could likely get cost share from LSRCP, or possibly full costs paid by LSRCP
6. stocking plans for 2009 are for 12,000 catchables and 300 jumbos
7. 2003 estimated costs for repair: \$214,600 for repairs and \$42,900 to decommission. Could reduce volume to below DOE threshold for \$30,000.
8. this lake is constricting the river channel and reducing floodplain
9. the intake was repaired to provide adequate fish passage in 2008, but it has been repaired several times in the past 10-12 yrs – chronic maintenance costs.