

Apache Lake Fish Habitat Project

Progress report

Permits/permission:

The necessary permits and permission letters have been received for the project from the following agencies:

- Army Corp of Engineers- Project falls under the Nationwide Permit Number 4- “Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities”
- USFS- Letter of review and support for the project under a “Decision Memo” from the Tonto Basin Ranger District of the Tonto National Forest
- SRP- Letter of review and non-objection to the project

Habitat design:

The “Pisces Pyramids” fish habitat designs were conceived as the primary structure for this project. It is the compilation of “what works” for holding fish based on past fish habitat enhancement projects, personal underwater observations of fish use within similar woody structures and completed fish habitat project reports/literature reviews. The design is simple and fulfills several key components for attracting and holding fish such as largemouth bass, smallmouth bass, crappie, catfish and sunfish. Important are the upright positioning of natural trees, overstory cover of the pallets, and cavity concealment within the pallets. The pyramids are constructed by stacking 3 wooden pallets to form a tepee (held together with cable-ties), then affixing juniper trees to each side using zip-ties and finally stacking 5 cement blocks inside the tepee to weigh down the structure. Further cabling with duckbill anchors will prevent any pyramid floatation or lateral movement. All construction is planned to take place at the designated habitat sites on a dry lakebed.



Materials list:

Based on the estimated 840 trees we can secure for the project, the following list identifies components and amounts needed to complete the 420 pyramids planned for 8 sites on Apache Lake.

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| ○ Pallets (standard size 40” x 48” pine, 3 per pyramid) | 1260 |
| ○ Cement blocks (standard size, 5 per pyramid, act as weights/anchors) | 2100 |
| ○ Zip-ties (18-24”plastic, used to secure blocks to pallet and trees to frame) | 4620 |

Fencing- Six foot chain link fencing will be necessary to provide security for material storage near Burnt Corral and the Marina sites. The Burnt Corral site will store 30% of the materials for the project and the Marina area the remaining 70%. Area perimeters and length of fencing have yet to be determined. It is estimated that the approximate area to be secured is 100’ x 100’ with two separate sites. These sites need to be secured from about August 1, 2006 till January 1, 2007.

To make a monetary or material donation please contact Mike Self, Arizona Bass Federation Conservation Director at (602) 980-1921 or E-Mail mike.self@peoriaaz.gov.

Additional assistance that is needed to include volunteers:

Transportation- Hauling the trees from the Pleasant Valley area to Apache Lake during the months of late September to mid October. This can augment the 2 man Development crew that will be hauling and staging trees next to the Young road for transport. We may need transport of the pallets and block from AGFD offices in east Mesa to the secured areas at Apache Lake. Pontoon boats or barges can be employed to move materials from the launches across the lake to the habitat treatment sites.

Heavy equipment- Additional loaders will be needed to pick up trees at staging area in Pleasant Valley and unload at Apache Lake. Forklifts would be useful at the fenced security areas at the lake to move materials to the launch ramps and off load at the habitat sites.

Labor- Much of the work will be in moving the raw components from the secure areas to the launch ramps, across the lake and unloading at the pre-selected habitat construction sites. Once at the site, volunteers can build the Pisces Pyramids in designated zones under the supervision of an AGFD project foreman. Tentative dates for this implementation phase of the project will be November 17-December 18, 2006 when water levels will be lowered 50 feet below maximum.

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