



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

2221 WEST GREENWAY ROAD
 PHOENIX, AZ 85023-4399
 (602) 942-3000 • AZGFD.GOV

GOVERNOR
 JANET NAPOLITANO
 COMMISSIONERS
 CHAIRMAN, JOE MELTON, YUMA
 MICHAEL M. GOLIGHTLY, FLAGSTAFF
 WILLIAM H. MCLEAN, GOLD CANYON
 BOB HERNBRODE, TUCSON
 JENNIFER L. MARTIN, PHOENIX
 DIRECTOR
 DUANE L. SHROUFE
 DEPUTY DIRECTOR
 STEVE K. FERRELL



August 18, 2006

Mr. Bruce Ellis, Chief
 Environmental Resource Management Division
 Phoenix Area Office
 Bureau of Reclamation
 6150 W. Thunderbird Road
 Glendale, AZ 85306-4001

RE: Draft Environmental Assessment (EA) on the proposed Scorpion Bay Marina and Yacht Club, Lake Pleasant Regional Park (LPRP), Maricopa County, Arizona

Dear Mr. Ellis:

The Arizona Game and Fish Department (Department) has reviewed the Draft Environmental Assessment for the proposed construction and operation of a new marina to be called Scorpion Bay Marina and Yacht Club. The Department feels that the proposed action will result in significant impacts, such as consequences for angler use, introduction of aquatic non-native invasive species, and human safety issues. These concerns are more fully described below.

1) Loss of angler access and increased recreational boating traffic/angler use conflict

Conflict with recreational boaters is a major source of complaint and frustration by anglers in Arizona (Pringle 2004). Substantial increases in watercraft traffic associated with the proposed new marina will lead to greater competition for space and overlap of incompatible uses. Anglers often avoid high levels of recreational boating and may eventually withdraw participation due to user conflicts. Ultimately, angler use is likely to be reduced seasonally and at peak use periods, even with intensive recreational management. In 2001, anglers spent over 500,000 angler days on Lake Pleasant (Pringle 2004) providing an estimated \$82 million per year in direct and \$107 million total economic benefit to the area (Silberman 2003). Loss of shoreline access and increased watercraft-based recreation will likely decrease angler quality of experience, and subsequently use, at Lake Pleasant.

The Department recommends that angler use be enhanced within the lake to offset expected impacts to angler opportunities with installation of fishing docks, platforms, or piers. Additional partitioned angling opportunity could be added through public

H-15



access (even limited) to Hank Raymond Lake, which is owned and operated by MWD. We would be interested in discussing opportunities to increase angler use and access at Lake Pleasant and surrounding waters in order to offset impacts from the proposed action.

2-1

The Draft EA did not identify whether or not angling would be allowed within the proposed marina. Angler access within the proposed marina footprint appears to be excluded, and the proposal does not address angler access within the marina. We recommend that the facility include fishing areas and/or fishing docks or platforms to offset reductions in angler access resulting from construction of the proposed marina. Similarly, we recommend public angler access be provided and maintained through active management of the facility.

On a similar note regarding increased conflicts between competing recreation water users, sailing is a popular activity on Lake Pleasant. Conflicts between motorboat and personal watercraft operators and sailing regattas may increase as a result of the proposed project.

2-2

2) Increased risk of non-native invasive species introduction

The proposed project calls for a 60% increase in boat traffic at Lake Pleasant. This significantly increases the opportunity for introduction and spread of aquatic non-native invasive species. Invasive aquatic species frequently have large adverse impacts on aquatic ecosystems, while causing millions of dollars in economic losses for affected industries and stakeholders due to treatment costs and control treatments. Invasive species represent direct threats to infrastructure facilities, including water delivery structures and hydrological power operations. Recreational use, such as angling and boating, are also heavily impacted by the establishment of invasive species.

Although they have not been yet been established in State of Arizona waters, introduction of zebra mussels is a real threat. In May 2004, officials detained people from Kentucky from launching a boat at Temple Bar into Lake Mead because several zebra mussels were attached to the hull. Veligers (the microscopic larval stage of zebra mussels) were identified in water samples taken from the generator intake filter. Later that summer, another boat from Chicago, was detained after marina mechanics repairing a bent prop shaft found zebra mussels inside both of the outdrives. Increasing boat access to Lake Pleasant undoubtedly increases the chances that zebra mussels, or another invasive aquatic species, will be introduced.

2-3

Additionally, in the past year, Department staff has recently detected two fish species not previously identified as occurring in Lake Pleasant. The inland silverside (*Menidia beryllina*) and grass carp (*Ctenopharyngodon idella*) were discovered by field staff during routine sampling efforts. While the method of introduction in these instances is unknown, it is highly likely that increased recreational use of Lake Pleasant will result in more species introductions that could result in adverse impacts to the aquatic ecosystem.

Some of the most effective approaches to minimize the likelihood of introduction and spread of invasive species is information and education, and equipment wash areas. The Department encourages planning and integration of invasive species prevention information and education programs. Furthermore, we recommend that the marina include a boat/watercraft wash station to allow spray-off of boats as they leave, or before they enter the water. Such preventive measures will reduce the likelihood of introduction and spread of existing and future invasive/harmful aquatic species.

2-3

3) Public Safety

The proposed action will result in a substantial increase in motorized water recreation vessels on Lake Pleasant, and a subsequent increase in the number of boating related accidents. The U.S. Coast Guard ranks Lake Pleasant as being consistently in the top 15 of the most dangerous recreational lakes in the United States, with the most frequently reported accident being a collision with another vessel.

Carelessness and reckless operation, operator inattention, operator inexperience, and excessive speed are the leading contributing factors of all reported accidents, requiring a strong law enforcement presence to minimize these dangers. The Draft EA does not include a plan to increase law enforcement presence to handle increased recreational activity on Lake Pleasant. This presents an increased risk to human safety, and we recommend identifying and implementing a plan to increase the number of law enforcement officials present. Although the Department is the lead watercraft agency for the State of Arizona, we do not have the funding necessary to expand our law enforcement presence beyond the 10% of the two employees time already allocated to Lake Pleasant.

2-4

4) Environmental Quality at the Marina

The Department has several concerns regarding the operation of the marina. The proposed marina facility includes a boat pump out station for transfer of sewage wastes. However, the Draft EA does not mention establishment of a routine water sampling program to monitor the water within the boat slips for fecal coliform. High levels of fecal coliform in the water contribute to the spread of pathogenic diseases. The Department recommends that a water sampling protocol be developed to routinely test the water near the boat slips fecal coliform contamination resulting from deliberate or accidental discharge of sewage directly into the water.

2-5

Carbon monoxide poisoning is also another concern not mentioned in the Draft EA. The Draft EA did not mention if natural winds will provide sufficient ventilation in the boat slip area, especially while boats are idling. The Department recommends the development of an educational program to inform boaters of the dangers of carbon monoxide poisoning, including the need to minimize unnecessary prolonged idling while in the slip and in close proximity to other vessels.

2-6

Correction

We found the following error in Table 5 on p.41 of the Draft EA. According to the 2005 Arizona Boat Safety Report published by the Department, 13, and not 30, injuries occurred in 2005 on Lake Pleasant.

2-7

Thank you for the opportunity to review and provide comments on the proposed project. If you have any questions, please contact Nicole Brown, Aquatic Habitat Program Supervisor, at (602) 789-3609 or by email at nbrown@azgfd.gov.

Sincerely,



Bob Broscheid
Habitat Branch Chief

BB:nlb

Literature Cited

Pringle, T. 2004. Statewide survey of 2001 Arizona anglers. Fisheries Technical Report 03-01. Statewide Fisheries Investigations, Federal Aid Project F-7-M-46. Arizona Game and Fish Department, Phoenix Arizona.

Silberman, J. 2003. The economic importance of fishing and hunting, economic data on fishing and hunting for the state of Arizona and for each Arizona county. Arizona State University West.

cc: Steven Spangle, Field Supervisor, USFWS
Larry Riley, Fisheries Branch Chief, AGFD
Jim Warneke, Fisheries Program Manager, FOR6, AGFD
Rebecca Davidson, Project Evaluation Program, AGFD

RESPONSE TO COMMENT LETTER NO. 2

ARIZONA GAME AND FISH DEPARTMENT

- 2-1. MCPRD recognizes that conflicts do arise between recreational boaters and anglers who compete for space and sometimes have overlapping incompatible uses. Visual observations by MCPRD staff, of boating activity and the monitoring of day passes, do indicate, however, that (1) the peak fishing season (late fall to early spring) differs from the peak power boating season (late spring to early fall); and (2) prime fishing times occur during early morning/evening hours, whereas prime boating occurs late morning to early evening. This helps to reduce some of these conflicts. According to MCPRD, certain areas have been buoyed to prohibit water skiing in areas utilized primarily for fishing. These areas also have been buoyed to make them “no wake” areas, to indicate shallow water and to protect wildlife habitat, such as the bald eagle. MCPRD has employed buoys as a means to enhance safety, preserve the environment and enhance the recreational enjoyment for patrons.

Due to safety and privacy concerns, fishing within the marina proper would not be allowed. The concessionaire has committed to constructing an artificial rock reef in the vicinity of the new marina and hanging fish structures under the floating wave attenuators to enhance the habitat for aquatic life and improve spawning. Fishing would be allowed in these areas; however, the areas would only be available by boat. These habitat improvements are included as proposed mitigation measures in the concessionaire’s Clean Water Act Section 404 permit application. Under the Use Management Agreement (UMA) between Maricopa County and the concessionaire, and contingent upon receiving grant assistance through MCPRD, the concessionaire would also construct an Americans with Disabilities Act (ADA) accessible public fishing pier. The concessionaire also has committed support to fishing tournaments.

- 2-2. Representatives from various sailing clubs were provided the opportunity to comment on both the July and October 2006 versions of the draft EA; no comments were received regarding concerns about conflicting use during sailing regattas.
- 2-3. We agree introduction of non-native invasive species is a concern, and boats entering Lake Pleasant that have been at other lakes increase the opportunity for introducing non-native aquatic species into Lake Pleasant. However, there would be less likelihood of such an introduction once boats are stored at the proposed marina, either in wet slips or dry storage, since boaters storing their watercraft at a marina are less likely to travel amongst the various lakes.

None of the current public access boat ramps at Lake Pleasant, including those at LPRP and the Pleasant Harbor Marina, have a boat wash station. Also, boats are allowed to launch from the shoreline. The concessionaire would be willing to consider installing a boat wash station at the proposed marina if all other potential access points are required to install them as well. In the interim, the concessionaire would provide boaters with information on how to control the spread and impacts of invasive non-native species, in cooperation with MCPRD and the AGFD.

- 2-4. We were able to find only one reference to the U.S. Coast Guard's ranking Lake Pleasant consistently among the 15 most dangerous recreational lakes in the Nation—this was a 2002 Arizona Water Resource News Briefs article on the internet indicating that out of a list of the Nation's 15 most dangerous water bodies for boating-related injuries, six were located in Arizona. The article did not specify the time frame of the study, or how the analysis was conducted. The article did indicate Lake Pleasant had 155 reported injuries. As noted in Table 9 of the October 2006 revised draft EA, according to the AGFD annual boating safety reports, during the years 2003 through 2005, there were a total of 41 reported injuries.

As stated in the EA, under an agreement with MCPRD, the MCSO has the authority to shut down the public boat ramps in the event it believes the quantity of watercraft on the lake creates a safety hazard. Captain Edward Lopez, MCSO, indicated to Reclamation in a letter dated August 16, 2006, that the MCSO is prepared to add more manpower on a daily basis if required, to respond to the need for increased law enforcement presence due to the increase in watercraft traffic. Additionally, access to MCSO resources such as, but not limited to, Lake Patrol, Trails Division, Dive Team, Posse, District units, Detectives, Search and Rescue, K-9, etc., provides MCPRD with a wide variety of law enforcement tools to address safety and/or security concerns at events occurring at Lake Pleasant and the surrounding LPRP. The concessionaire has offered to donate space to the MCSO Lake Patrol which will increase its visibility on the lake and around the new marina complex. Both the MCPRD and MCSO, along with the AGFD and U.S. Coast Guard, continue to support boater safety education classes, public awareness, law enforcement, safety days, and public interest spots regarding boating safety.

With the population growth in the area and the desire for water-oriented recreation activities, it is a given that watercraft traffic at Lake Pleasant will increase, with or without the proposed project. There is no doubt that increasing densities of watercraft on Lake Pleasant will eventually dictate more rigorous management of watercraft activities. As noted in the EA, this is expected to occur sooner under the proposed action than would be expected to occur under the No Action alternative.

- 2-5. The marina operation would abide by all applicable Federal, State and local regulations and ordinances regarding, among other things, water quality. According to MCPRD, the concessionaire has obtained the sponsorship of the city of Peoria and has initiated application for a Maricopa Association of Governments (MAG) Clean Water Act section 208 permit. These are requisites for the Maricopa County Environmental Services Department's (ESD) permitting process for the marina's water/ wastewater design, which includes the boat pump-out system. We believe the ESD is in the best position to determine whether or not monitoring for fecal coliform, or any other constituent, should be required as part of its permitting process.

The concessionaire has proposed to install a “state-of-the-art” boat pump-out system, consisting of a vacuum system that removes waste from boats and transports it to the lift station at the boaters’ supply store. The system would be constructed in part with grant monies obtained through a FWS grant program administered by AGFD pursuant to the Clean Vessel Act of 1992. This Act was passed to help reduce pollution from vessel sewage discharges.

- 2-6. Carbon monoxide (CO) poisoning related to water-based recreation is generally attributed to activities occurring on or in the water near the rear of the boat where the motor is located, in areas where idling boats congregate in large numbers, or during activities such as “teak” surfing (body surfing by hanging onto the ski step on the back of a motorized boat) or dragging behind a slow moving boat. It can also occur in older boats within the cabin or other enclosed areas. If only because of fuel costs and wear and tear on motors, it is anticipated boaters are not likely to keep their motors idling for long periods of time within the wet slip area.

According to a recent article in the Arizona Republic (July 29, 2006), there were two reported CO poisonings in 2003, as well as two on July 23, 2006, when two women were poisoned while swimming near a number of boats in Humbug Cove. Another Arizona Republic article (September 15, 2006) quotes a study by the Arizona Department of Health Services and Peoria Fire Department, “The density of watercraft and the large number of people gathering at Humbug Cove creates an environment for individuals to become exposed to excessive carbon monoxide emissions....” The report identifies there are dangers of CO poisoning within the cove because of the presence of idling boats, alcohol consumption, and the absence of wind and natural ventilation.

MCPRD, MCSO, and the Peoria Fire Department all have been participating in public awareness campaigns regarding the dangers of CO poisoning, distributing educational information to boaters and the general public. According to the July 2006 Arizona Republic article, Peoria Fire Department is also monitoring CO levels at Lake Pleasant. The concessionaire would make pamphlets and warnings regarding CO poisoning readily available at the marina facilities. The draft EA was revised to reflect this.

- 2-7. This correction has been made. Thank you.