

adverse at most locations. All Texas and federal watercraft laws and regulations apply to PWC operators, including regulations that address reckless or negligent operation, excessive speed, hazardous wakes or washes, hours of operation, age of operator, access to the shore at flat wake speeds, distance between vessels and prohibition on operating a vessel at greater than flat wake speed less than 50 feet from the shoreline. The park enforces Texas Parks and Wildlife Department regulations through 36 CFR 3.1 and the park's concurrent jurisdiction authority. The designation of flat wake zones will restrict vessel speeds in the back coves and lake arms, which will have beneficial impact to species in back coves and lake arms. There are an estimated 60 species of mammals that occur in the Lake Meredith National Recreation Area. Common mammals include mule deer, coyote, porcupines, raccoons, foxes, squirrels, rabbits, a few bats, and several varieties of rats and mice. Larger predators include mountain lions and bobcats. Over 200 species of birds are present including wild turkey, bobwhite, scaled quail, mourning dove, roadrunner, great blue herons and red-winged blackbird. The most common of the 15 species of fish present include walleye, catfish, largemouth and sand bass, crappie, bluegill and carp. Eleven amphibian species and 32 reptile species are also found at Lake Meredith including two poisonous snakes (prairie rattlesnake and diamondback rattlesnake). Since these are generally land mammals, little wildlife uses the open water, where PWC speeds are higher.

On a cumulative basis, all visitor activities would continue to have short-term, negligible to minor, adverse effects on wildlife and wildlife habitat. All wildlife impacts would be temporary. Therefore, this proposed regulation would not impair wildlife or wildlife habitat.

Threatened, Endangered, or Special Concern Species

This proposed regulation aims to protect threatened or endangered species, or species of special concern, and their habitats from PWC disturbances. The Endangered Species Act (16 U.S.C 1531 *et seq.*) mandates that all federal agencies consider the potential effects of their actions on species listed as threatened or endangered. If the National Park Service determines that an action may adversely affect a federally listed species, consultation with the U.S. Fish and Wildlife Service is required to ensure that the action will not jeopardize the

species' continued existence or result in the destruction or adverse modification of critical habitat. State and federally listed species were identified through discussions with park staff, informal consultation with the U.S. Fish and Wildlife Service, and project review by the Texas Parks and Wildlife Department. The U.S. Fish and Wildlife Service was contacted regarding federal threatened, endangered, and special concern species, as was the Texas Parks and Wildlife Department regarding state species. At Lake Meredith National Recreation Area it has been determined that none of the alternatives would *adversely* affect any of the listed species. However, the species at Lake Meredith that have the *potential* to be affected by proposed PWC management alternatives include the federally listed bald eagle and the Arkansas River shiner.

Continued, restricted PWC use at Lake Meredith National Recreation Area would have no impact on endangered, threatened or sensitive species. Bald Eagles are present only in the winter season when PWCs are generally not in use. Additionally, there is no known summer nesting of Bald Eagles in the park. There is designated critical habitat for the Arkansas River shiner within park boundaries in the Canadian River however, the map identifying critical habitat area is likely to change. (As part of a recent court decision, the U.S. Fish and Wildlife Service agreed to jettison its policy outlining a habitat area for the minnow and draft a new one.) The park is proposing to close that section of the river to protect this critical habitat. Therefore, there would be no perceptible changes in concerned species' populations or their habitat community structure. All impacts on these species and habitat due to PWC use would be temporary and short term. The intensity and duration of impacts are expected to remain constant over the next 10 years, since PWC numbers are anticipated to remain steady. Also, cumulative effects from all park visitor activities would not likely adversely affect these species since the identified species are not present or are not accessible during the course of normal visitor activities on Lake Meredith.

Therefore, this proposal would not result in an impairment of threatened, endangered, or special concern species.

Shoreline Vegetation

Wind and wave action erodes areas along the steeper to more moderately inclined shorelines and a sometimes cause landslides that slip into the reservoir. Vegetation is relatively sparse below the historic high water level within the steeper to moderately

inclined slopes. Recent growth is present in the more shallow backwater areas with less, or relatively flat, relief. These shallow areas are frequently filled with dense vegetation growth including invasive species; they are occasionally inundated killing off adjacent disturbed day land and shallow water plants. Vegetation upon slopes offers little resistance to land or mudslides and erosion by waves and erosion is accelerated as a result of fluctuating water levels.

PWC use would have negligible adverse impacts over the short and long term because there would be no perceptible changes to plant community size, integrity or continuity now or in the future. The proposed PWC flat wake restrictions in back coves would result in beneficial impacts to shoreline vegetation from reduced wave action/erosion.

On a cumulative basis other visitor activities are more prevalent than PWC use. However, no obvious impacts currently exist, and impacts to shoreline vegetation would continue to be negligible. There would be no perceptible changes to plant community size, integrity, or continuity now or in the future. Therefore, this proposal would not impair shoreline vegetation.

Visitor Experience

In proposing this regulation for Lake Meredith, NPS aims to ease potential conflicts between PWC users and other park visitors.

To determine impacts, the current level of PWC use was calculated for areas of the recreation area. Other recreational activities and visitor experiences that are occurring in these locations were also identified. Visitor surveys and staff observations were evaluated to determine visitor attitudes and satisfaction in areas where PWC are used. Visitor survey data gathered at Lake Meredith National Recreation Area before the closure took effect suggests that the majority of visitors are satisfied with their current experiences. The potential for change in visitor experience was evaluated by identifying projected increases or decreases in both PWC and other visitor uses, and determining whether these projected changes would affect the desired visitor experience and result in greater safety concerns or additional user conflicts.

Under this proposed rule flat wake zones would be established and marked with buoys in lake arms and back coves (North Turkey Creek, Bugbee Canyon, North Canyon, North Cove, South Canyon, Sexy Canyon, Amphitheater Cove, the coves between day markers 9 and 11, Fritch Canyon, Short Creek,