# LAKE MANAGEMENT PLANS

Updated July, 2008 - J.W. Korth and J. Wisniewski

## Water(s): North Potholes (Westlake ponds)

**Description:** Potholes Wildlife Management Area, Section 31, T19N, R28E; Section 36, T19N, R27E and Section 1, T18N, R27E. Approximately 2 miles west of Moses Lake, Grant County, WA
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| Size: | Maximum Depth: | Volume: |
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| 125 surface acres | 8 feet | 300 acre feet |

OUTLET: None. Natural and man-made dikes separate waters (40 separate ponds) in the proposed treatment area (TA) from the main body of Potholes Reservoir.
INLET: none **Water Source: Potholes Reservoir and subsurface seepage from Moses Lake and irrigated land.**

**Management History:** The water proposed for treatment is a peripheral part of Potholes Reservoir and is within the Potholes Wildlife Area. Surface water in the treatment area is isolated from the remainder of Potholes Reservoir by a series of small dikes that were constructed in the late1970's. The purpose of the dike system was to allow management of warm-water (spiny-ray) fish species to provide an enhanced fishery. Management consisted primarily of removing carp and other undesirable fish species and re-stocking with desirable species (largemouth bass and bluegill).

In addition to the use by waterfowl, the TA is used heavily by a wide variety of wetland-associated wildlife species including the state endangered Northern Leopard Frog (NLF). The TA and a small part of Potholes Reservoir immediately adjacent to it contains the entire known population of the species in Washington.

Another of the more significant wildlife uses of the TA is by breeding ducks. Breeding duck use increased dramatically after rotenone treatment to remove carp in 1980. Numbers of duck broods peaked at very high levels (100+) in the early1980's, but declined annually to pre-treatment (very low) numbers by summer of 2003. Carp were observed in waters of the TA by the late-1980's.

The focus of wildlife management in the TA has been to insure habitat quality for leopard frogs and populations of a diverse assemblage of wetland-obligate wildlife species including breeding waterfowl and promote wildlife observation that does not result in negative impact to wildlife use.

Some of the more significant planned wildlife-related management actions in the TA in the future include: 1) Enhancing habitat quality for the NLF and desirable wetland-obligate wildlife

species. 2) Minimizing human disturbance during the nesting and brood-rearing period for ducks. 3) Maximizing in-water food resources (i.e., invertebrates and submerged aquatic plants) for ducks (e.g., carp removal). 4) Promotion of wildlife viewing in a manner that minimizes human disturbance of wildlife (i.e., design and implement a watchable wildlife 'trail' and other facilities to support it in the area). 5) Implement management actions (e.g., bullfrog control, tall emergent control and diking to isolate individual ponds ) to benefit the state-listed Northern Leopard Frog.

*T&E Flora and Fauna***:** Professionals from many resource fields have visited this site countless times during the last 40 years. Use of the area by several wildlife species of concern has been documented. These species include:

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| 1) Northern Leopard Frog | (State endangered) |
| 2) Bald Eagle | (State and Federal threatened) |
| 3) Western Grebe | (State candidate) |
| 4) Sagebrush Lizard | (State candidate) |

The TA and a small part of Potholes Reservoir immediately adjacent to it is the only location known to support the NLF in Washington. Research to identify limiting factors and habitat relationships for the purpose of protecting and enhancing the population is in progress and been conducted in the TA since 2002. Bald Eagle use of the TA is primarily during winter and early spring for feeding. Waterfowl is the primary component of the eagle's diet in the TA.

**Current Fishery Management Objectives and Strategy:** Plan for at least half of the ponds to remain fish-free to benefit Northern Leopard Frogs and ducks, primarily. Some of the larger ponds that do not dry up could have fish and fisheries without too severe a negative impact on wildlife use, especially if fishing intensity is "low".

- Manage for largemouth bass, crappie and bluegill.
- Season: February 1 – mid October (last day before hunting season opener)
- Statewide limits/size restrictions for all species.
- Provide low key, walk-in fishery (maybe 500 angler trips per year)
- Survey periodically (electrofishing, netting).
- Spot check angler use randomly during the year and assess periodically for presence of undesirable species.
- Continue rehabilitation with rotenone when populations of unwanted fish species become over-abundant.
- Re-stock as necessary with desired species salvaged from other area lakes.

**Current Wildlife Management Objectives and Strategy:**
Current wildlife-related management actions in the TA include: 1) NLF research and management. 2) Minimizing human disturbance during the nesting period for ducks and geese. 3) Maximizing in-water food resources (i.e., invertebrates and submerged aquatic plants) for ducks, geese and leopard frogs (e.g., coordinating with Fish Management program for carp removal). 4) Promoting wildlife viewing in a manner that minimizes human disturbance of wildlife. 5) Implementing management actions to benefit desirable species of wildlife and

control/limit undesirable species.