LAKE MANAGEMENT PLAN
Updated May, 2007 – Rocky J. Ross

Water(s): Byron Pond, Sunnyside Wildlife Area

Description: Sunnyside Wildlife Area, Byron Ponds Management Unit, Sections 9,10,11,12, T8N, R23E; approximately 4 miles east of Mabton, Yakima County.

Size:	Maximum Depth:	Est. Depth during treatment:	Volume:
83.72 surface ac.	4 feet	2 feet	147.11 acre feet

OUTLET: Water leaves a control structure and follows a narrow ditch through WDFW land, and then through two private ownerships before falling over a basalt cliff into the Yakima River. INLET: Three primary sources: 1) a spring that probably originates from an irrigation canal at a higher elevation, 2) overland flow of irrigation wastewater, and 3) pumped water from underground drainage pipes on private lands.

Management History: Irrigation and groundwater enters WDFW property via a canal that originates on adjacent private property. A water control structure was constructed in the late 1940s, which impounds this water in a shallow basin, forming what is considered one of the Byron Ponds. The primary purpose of the ponds and associated wetlands has been for waterfowl production, resting and hunting. However, the ponds have historically supported a spiny ray fishery.

In addition to the use by waterfowl, the treatment area (TA) is used heavily by a wide variety of wetland-associated wildlife species. Surveys will begin in May of 2007 to detect presence of select, reclusive marsh birds such as rails and bitterns.

One 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 1986. Numbers of duck broods peaked at very high levels in the late1980s, but declined annually to pre-treatment (very low) numbers by summer of 2000. Carp were observed in waters of the TA by the late-1980s, indicating a complete kill was not achieved. Due to the characteristics of incoming water, it is unlikely that the re-infestation occurred through these sources. Instead, based on personal communications, it is likely that all existing waters were not adequately treated with rotenone and some fish escaped the treatment.

Grazing used to occur on this management unit but it was discontinued in 1978. When the pond was drawn down prior to the last rotenone treatment, it allowed emergent vegetation to send up sprouts in the shallow water areas that became de-watered. When the pond level was raised, the emergent vegetation persisted, and the canopy of vegetation reduced the amount of open water. Some local citizens have deducted that removing the cattle has allowed the emergent vegetation to flourish.

The focus of wildlife management in the TA has been to insure habitat quality for breeding

ducks and populations of a diverse assemblage of wetland-obligate wildlife species and promote wildlife observation and fishing opportunities that do not result in negative impact to wildlife use.

*T&E Flora and Fauna***:** During the preparation of the 1997 Management Plan, a cross-divisional task team (CDTT) made up a list of the following sensitive plant and animal species that do, or could occur on this management unit:

1. Great Blue Heron
2. Bald Eagle
3. Western Grebe
4. Sagebrush Lizard
5. Long-billed Curlew
6. Ferruginous and Swainson's hawks
7. Loggerhead Shrike
8. Black-necked Stilt
9. Merriam's shrew
10. Grasshopper sparrow
11. Sagebrush vole
12. Northern grasshopper Mouse
13. White-tail jack rabbit
14. Desert night snake
15. Black-crowned night heron
16. Burrowing owl

Current Management Objectives: Primary management of the Byron Pond area described above will be for a spiny ray fishery and waterfowl. Because waterfowl production is the top priority, seasonal closures will likely remain in place to minimize disturbance to nesting birds.

Current Wildlife Management Objectives and Strategy:

Current wildlife-related management actions in the TA include: 1) Conducting controlled burns in areas of extensive decadent emergent vegetation to increase the percent of open water, 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 and geese (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, 6) restocking pond after rotenone treatment with bass and crappie to provide recreational fishery and competition for carp fry entering the pond through irrigation water.