



THE TRUMPETER SWAN SOCIETY
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November 19, 2008

Laura King, Planning Team Leader
U. S. Fish and Wildlife Service
134 Union Boulevard, Suite 300
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Dear Laura,

This letter expands upon our initial comments submitted on November 4 in which we highlighted our grave concerns regarding the draft CCP/EA for Red Rock Lakes National Wildlife Refuge (RRLNWR). We have asked that the Service rewrite that first draft because the entire document is based upon an inaccurate *Refuge History of Establishment* which failed to identify that RRLNWR was established in 1935 to preserve and protect the last known nesting population of trumpeter swans. That draft is fundamentally flawed because it is built upon a false foundation.

We would like to assist the Service in creating a CCP for RRLNWR that will benefit trumpeter swans and help fulfill the NWR System mission. We are submitting this letter to expand upon our earlier comments and suggest some specific ways to improve the document.

1) History and purpose of refuge establishment:

- a) An accurate summary of the *Establishment History* will clearly identify that RRLNWR was established for the specific purpose of protecting and preserving the last known Trumpeter Swans. **That establishment purpose should be the foundation for development of the CCP.**
- b) We have attached a list of some of the many documents that describe the history and purpose of establishment for RRLNWR. The detailed information provided by Banko (1960), Ward and Banko (1953) and the first-hand memoir by Ben Thompson in the George Wright Forum 4(4) are particularly excellent. These accounts document the urgency of creating a sanctuary for trumpeters in 1935 because swans were regularly being shot during fall waterfowl seasons in the Centennial Valley and species extinction was feared. For decades the history of RRLNWR establishment has been well known within the Service, among students of North American wildlife conservation history, and among waterfowl biologists and managers throughout the world.
- c) A revised draft should recognize that simply quoting the generic language from the authorizing authority is often not adequate to identify the specific purpose for which a refuge was established. As the Service has clearly recognized: *Often the specific*

purpose(s) of a refuge may not be immediately clear. This is because many refuges were established (or subsequent tracts were acquired) under one of more than 15 different statutes (e.g. Migratory Bird Conservation Act, Fish and Wildlife Coordination Act, or Refuge Recreation Act) that authorized acquisition of the refuge. Refuge purpose statements often consist of language excerpted from these statutes and can be too general to identify the original intent of the refuge. Therefore it is necessary to search further for specific information regarding the intent behind establishment of a refuge or acquisition of subsequent tracts (Identifying Resources of Concern and Management Priorities for a Refuge: A handbook, U.S.F.W.S., N.W.R.S., August 2008).

- 2) A second fundamental flaw of the draft CCP/EA is the extreme emphasis given to the concepts of managing for biodiversity, integrity and natural processes and the minimal emphasis given to the concept of wildlife management.**
- a) Service policy directs that CCPs must achieve refuge purposes; help fulfill the Refuge System mission; maintain and, where appropriate, restore the ecological integrity of each refuge and the Refuge System. However, this draft CCP/EA inappropriately makes managing for biological integrity, diversity, and environmental health (BIDEH) the primary foundation of the document. The draft is pervaded by the unspoken and unproven philosophy that by managing for the vague concepts of biodiversity, integrity, and natural processes, somehow all wildlife management and conservation needs will be adequately addressed. I was a member of the team that developed the Service BIDEH policy and I am sure that it was not intended to be used in this manner. There must be recognition that, even in this isolated area, the ecosystem and natural processes have been significantly altered by human activities. A “hands off” approach is a recipe for further deterioration of habitats and the populations of migratory birds that depend on them.
 - b) Although biodiversity, integrity and natural processes are the foundation of the draft CCP/EA, the terms “integrity” and “natural processes” are never defined, even though the document includes a six page glossary. The terms are so vague and immeasurable that they provide no way for managers, or the public, to evaluate management results.
 - c) The over-emphasis on BIDEH was carried to such an extreme that the Vision Statement includes no mention of managing, conserving, or restoring wildlife populations or of a desired future condition that includes healthy populations of all (or any) native wildlife species. Providing habitat of even the best possible quality is not an adequate future condition without focus on the wildlife. Trumpeter Swans illustrate this concept clearly –they almost became extinct by the 1930s even though their habitat remained in relatively good condition.
 - d) In apparent violation of CCP planning policy, which requires that “*At a minimum, each refuge should develop goals for wildlife species or groups of species, habitat (including land protection needs), compatible wildlife-dependent recreation, other mandates (such as refuge-specific legislation, executive orders, special area*

designations, etc.), and fish, wildlife, and plant populations, as appropriate”, **the draft CCP/EA contains no Goals or Objectives for wildlife species or groups of species.**

- e) Although the analysis of Environmental Consequences contains a section entitled “Habitat and Wildlife”, only habitat is discussed; there is no mention of impacts on wildlife species, populations, or species groupings.

3) Because of the fundamental deficiencies identified in points 1 and 2, the draft CCP/EA is completely inadequate in its Vision, Goals, and Objectives for trumpeter swan management and similarly lacking for other wildlife species.

- a) We suggest that the Vision Statement describe a desired future condition in which Red Rock Lakes NWR is a conservation leader in the regional efforts to protect and restore Greater Yellowstone’s nesting trumpeter swans and swan nesting habitat on the refuge is managed to improve nesting success and cygnet production. It would also be appropriate to include a desired future condition for other wildlife.
- b) We suggest incorporating trumpeter swan management Goals that emphasize:
 - 1) minimizing human disturbance in traditionally used nesting areas to encourage establishment of new territories by subadults and prevent disruption of nesting attempts or brood survival
 - 2) managing water levels to reduce nest flooding
 - 3) maintaining or improving the suitability of traditionally used nesting ponds and other nest sites
 - 4) increasing pre-nesting and brood rearing food resources
 - 5) continuing the refuge’s historic role in monitoring and assisting with habitat conservation and improvement off-refuge in the Centennial Valley, and
 - 6) aerial monitoring to accurately document occupied territories, active nests, successful nests, and cygnet survival and coordinate methods and results with other swan managers in the Greater Yellowstone Trumpeter Swan Working Group.
- c) We suggest that Objectives for trumpeter swan management should include:
 - 1) Rebuilding nesting pairs substantially above the minimum objective of 19 nesting pairs in the entire Centennial Valley (on and off-refuge) mentioned in the July 2008 Pacific Flyway Management Plan for Rocky Mountain Population Trumpeter Swans. The previous objective, contained in the draft NWR Concept Plan for Trumpeter Swans (circa 2002), had been 20-30 nesting pairs within the refuge. We are not aware of any data that justify lowering the refuge’s nesting pair objective below 20 pairs. The refuge had 28 occupied territories and 15 active nests as recently as 1999.

- 2) The CCP should clearly recognize that refuge summer habitat previously supported 30-60 nesting pairs in many years and often fledged >30 cygnets. There is no evidence that current refuge summer habitat could not support at least the previous Objective of 20-30 nesting pairs, if properly managed.
 - 3) Maintaining lower water levels during the crucial April-July nesting period to minimize nest flooding and increasing food availability, particularly of *Elodea canadensis* during the crucial pre-nesting and brood rearing periods
- d) Impacts of human disturbance on nesting swans from fishermen, photographers, birdwatchers/hikers, and refuge staff/researchers should be specifically discussed under the analysis of environmental consequences and no increases of disturbance in nesting areas should be permitted. Impacts from current levels of disturbance should also be thoroughly evaluated.
 - e) Expansion of big-game hunting should not be permitted in areas that have been set aside as fall waterfowl feeding sanctuaries. The location of fall sanctuary feeding areas for swans and other waterfowl should be clearly portrayed on refuge use maps. The fall hyperphagia period is very important for trumpeters to gain the energy reserves that will help them survive winter and sanctuary areas that contain high quality food are very important.
 - f) No actions should be proposed that would eliminate or reduce the suitability of historically productive swan nesting territories.
 - g) No actions should be proposed that would reduce food resources available to Centennial Valley breeding pairs during the crucial late winter pre-breeding period when pairs gain the nutrient reserves essential for successful nesting. This is of particular concern at spring-fed ponds, such as Culver and MacDonald, where the most important spring food plant, *Elodea canadensis* has been abundant in the past.
 - h) The draft CCP should clearly recognize the crucial importance of cygnet production at RRLNWR to the dispersal of subadults and rebuilding of successful nesting on adjacent portions of the Centennial Valley west of the Refuge and in nearby areas of Idaho and Yellowstone National Park.

We do not understand the repeated reference in the draft that previous intensive management for trumpeter on the refuge focused on “hatching eggs, raising cygnets to fledging age, and feeding adult swans during the winter months”. Winter feeding certainly was a major previous action, but intensive management focused primarily on monitoring of nesting and fall populations, manipulations of water levels, minimizing human disturbance, improvement of various wetlands for nesting, and removing some eggs and wild-raised cygnets for restoration efforts in other parts of the U.S. “Hatching eggs” and “raising cygnets to fledgling age” was never a significant artificial or unnatural refuge program. However, increasing the numbers of wild swans that successfully hatch eggs and raise cygnets to fledging has been, and hopefully will continue to be a prime management goal.

4) Management of submerged aquatic vegetation (SAV)

- a) The few quantifiable objectives in the draft CCP/EA for wetlands relate mostly to the attempt to increase production of desirable SAV species, particularly *Elodea canadensis* and *Potamogeton* sp. We agree that increases in these species, particularly of the important early spring food, *Elodea*, would benefit trumpeter swans.
- b) Given the great interest in SAV management in the draft, we are quite surprised that the draft CCP/EA does not reference the extensive summary of the refuge's historic SAV information written for the Service in 1987 by David Paullin, Dr. Oz Garton, and Ruth Shea Gale. That summary compiled all previous survey data, discussed refuge survey methods and their shortcomings, six primary factors that affect the relative abundance of various SAV species, succession, fluctuation, and competition among SAV species, and the responses to environmental change of the key SAV species found at RRLNWR.
- c) That analysis of SAV occurrence and ecology on the refuge is included as a chapter in the 1987 report by Gale, Garton and Ball on "The History, Ecology and Management of the Rocky Mountain Population of Trumpeter Swans, which was funded in large part by FWS Region 6 and which formed the basis for terminating winter feeding and several other subsequent management actions at RRLNWR. This report contains summaries of refuge swan habitat management, population management, past swan population and productivity trends, and an analysis of the impact of water management at the lower control structure upon various measures of refuge cygnet production. This document was written with the assistance of most regional swan managers as well as all previous living managers of RRLNWR and reviewed by FWS migratory bird staff of Regions 1 and 6. The draft CCP/EA should have made use of this resource.
- d) The Paullin et al. chapter on SAV stressed the need for reducing spring water levels to benefit trumpeter swans and also stressed the unique value of *Elodea* as an important early spring food, particularly at Culver Pond where it has been very abundant. However, Paullin et al. also warned of the high vulnerability of *Elodea* to over winter mortality because it lacks a winter dormancy mechanism and is dependent upon adequate winter irradiance for survival. For that reason, the spring-fed ponds on the refuge, where ice is thin or non-existent, are extremely important for making *Elodea* available as nesting pairs return to the refuge in late winter-early spring. The proposal to eliminate Culver and Macdonald ponds could therefore have significant adverse impacts on refuge nesting pairs and should be abandoned. Past data on movements of marked RRLNWR trumpeters indicate that local swans would most likely merely be displaced to other nearby heavily used wintering sites in Idaho. There are no data to support the statement that removing this pond habitat would further expand the winter range of RMP trumpeter swans.
- e) Because *Elodea* is highly vulnerable to over-winter mortality, this species' ability to survive frequent fall-winter draw-downs should be thoroughly explored before a strategy involving frequent late-season draw-downs is implemented.

5) The draft CCP fails to recognize the ecological importance of RRLNWR to the Greater Yellowstone Ecosystem (GYE) and to discuss key ecosystem habitat and wildlife population issues that would potentially be impacted by Refuge management.

- a) For over 20 years, most wildlife populations and resource management issues in the RRLNWR vicinity (including trumpeter swans) have been analyzed and discussed in the context of the Greater Yellowstone Ecosystem. Many wildlife species and issues at RRLNWR are directly related to the overall GYE. The lack of recognition of the ecological relationships between the Refuge and the GYE in the draft CCP/EA is a glaring omission.
- b) Rather than considering RRLNWR in the context of the GYE, the draft CCP discusses “Ecosystem Description and Threats” in the context of a huge watershed entity (the Upper Missouri-Yellowstone-Upper Columbia River ecosystem), which extends from the Canadian border in NW North Dakota to the continental divide immediately south of RRLNWR. This watershed approach has little relevance for migratory bird management. The FWS “ecosystem approach” failed and was abandoned, largely for that reason. Unfortunately, although water may not cross this FWS “ecosystem” boundary, wildlife certainly does: trumpeters regularly move back and forth from the refuge to important nearby habitats in Idaho and refuge swans are directly impacted by management actions in Idaho. Obviously, many other species of important migratory birds do also. Yet the draft CCP/EA completely whites-out all adjacent portions of Idaho and omits them from all discussion, as if an ecological wall existed along the Idaho/Montana state line. This likely has more to do with the fact that the state line forms the Region 6-Region 1 administrative boundary than with any ecosystem context for Refuge management. This section should be completely rewritten.
- c) National Wildlife Refuges are supposed to be a “system” of lands, however there is no mention of the relationship of other refuges in the Tri-state area that are connected by shared migratory bird resources including trumpeter swans. In addition, there is no discussion of the inter-relationship of other habitat areas managed by agencies, tribes, or private individuals that are collectively important for migratory bird conservation.

In our discussions with the National Park Service, Bureau of Land Management, Pacific Flyway States, and conservation organizations there appears to have been very limited coordination and collaboration with these important partners during the development of this draft plan/EA. There is no mention of the 2008 Pacific Flyway for RMP Trumpeter Swans, the North American Waterfowl Management Plan, the Intermountain West Joint Venture, or the wildlife action plans in the Tri-State area. Given the direction of the FWS in planning and management over the last 20 years, this is quite unexpected and inexplicable. There also appears to have been little or no coordination even with other programs within the FWS.

Again, because these flaws in this draft CCP/EA are so fundamental, we ask that the Service rewrite this draft based on a correct foundation with trumpeter swan conservation as a major goal and produce another draft CCP/EA for public comment rather than attempt to finalize the current flawed document.

Given the massive economic problems and federal deficits, the projected staff and housing increases required for implementation of Alternative B may have become unrealistic. Perhaps the next draft of the CCP should include an alternative that could be implemented with a static or reduced budget

The Trumpeter Swan Society is the only North American nonprofit organization dedicated to the vitality and welfare of wild trumpeter swans. Please call on us if we can be of assistance in producing a viable, credible CCP.

Sincerely,

/SIGNED/

John E. Cornely, Ph.D.
Executive Director

A few of the many references re RRLNWR History of Establishment with annotations

Banko, W. E. 1960. The Trumpeter Swan, its history, habitats and population in the United States. North American Fauna No. 63. US Bureau of Sport Fisheries and Wildlife, Washington, DC.

Winston Banko was a manager of RRLNWR in the 1950s. In his monograph (p. 172-175) he included a lengthy account of the National Park Service efforts to save the trumpeters and gain refuge protection for the Centennial Valley, culminating in convincing Ding Darling, Chief of the Biological Survey, to visit the area in 1934 and recommend acquisition due to the urgency of the swan program.

Bureau of Biological Survey. 1935. Detailed Plans. Red Rock Lakes Migratory Bird Refuge. Project of the Bureau of Biological Survey. Unpublished Report.

This report, apparently written by Basyl Kercheval, documents that the majority of the trumpeter swans existing were in the vicinity of the proposed refuge. It further notes that illegal shooting of trumpeters is occurring in the area. Red Rock Lakes is recognized as the foremost breeding, nesting and resting habitat for waterfowl in Montana.

Denson, E. P. 1970. The Trumpeter Swan, *Olor buccinator*: A conservation success and Its Lessons. Biological Conservation 2(4):253-256

Eley P. Denson, Office of Endangered Species/International Activities, Bureau of Sport Fisheries and Wildlife, USDI, Washington, DC: *“The lessons learned in saving the Trumpeter Swan are proving invaluable. The Bureau is currently using techniques pioneered in preserving these birds in an attempt to perpetuate nearly 30 forms of United States wildlife which are in danger of extinction. The steps taken in the past which are a model for future action are: (1) Immediate physical protection, from Man or from change, of the remaining population and habitat known to be essential to survival.*

Fjetland, C. A. 1974. Trumpeter Swan Management in the National Wildlife Refuge System. Transactions of the Thirty-Ninth North American Wildlife and Natural Resources Conference. Pp. 136-141.

Conrad Fjetland, US Bureau of Sport fisheries and Wildlife, Pierre, SD. *“Trumpeter swan management on national wildlife refuges began with the establishment of Red Rock Lakes National Wildlife Refuge in Montana in 1935 to protect the remnant swans in the Centennial Valley.”*

Hansen, H. A. 1973. Trumpeter Swan Management. Wildfowl 24:27-32

Henry A. Hansen, US Bureau of Sport Fisheries and Wildlife, Anchorage, AK. *“The precarious condition of the Trumpeter led to the acquisition of the Red Rock Lakes National Wildlife Refuge in Montana in 1935 by the U.S. government.”*

Hull, A. V. 1939. Trumpeter Swans, their management and preservation. 4th No. Am. Wildlife Conf. Pp. 378-382.

Archie Hull was the first manager of RRLNWR, US Biological Survey, Monida, MT.

“Acquisition of the Red Rock Lakes area was undertaken by the Biological Survey in 1934, mainly for the purpose of perpetuating this magnificent bird.”

Sharp, W. M. and W. E. Banko. 1953. Red Rock Lakes: A National Wildlife Refuge for Trumpeter Swans. US Fish and Wildlife Service, USDI, Washington, DC

First sentence: *“RED ROCK LAKES MIGRATORY WATERFOWL REFUGE in southwestern Montana was established to preserve and protect the trumpeter swan, largest of North American waterfowl”.* ‘

Also: *“Later studies by the National Park Service showed that isolated breeding pairs still existed both within and outside the Park, and a campaign was launched in the early 1930s to save this species from the threat of extinction. Without a doubt, the most fruitful result of this public airing of the trumpeter’s plight was the establishment by the USFWS in 1935 of the 40,000-acre Red Rock lakes Migratory Waterfowl Refuge in southwestern Montana.”*

Thompson, B. undated. George M. Wright 1904–1936. The George Wright Forum, Vol 4. No. 4. (see George Wright Society web site) www.georgewright.org/044thompson.html

Ben H. Thompson, Assistant Director, National Park Service [Retired] wrote a memoir honoring George Wright in which he described in detail how Wright, Roger Toll and he had lunch with Ding Darling and urged him to establish a refuge at Red Rock Lakes to protect the last trumpeter swans.

USFWS current in 2008. U.S. Fish & Wildlife Service National Wildlife Refuge System Chronology. <http://www.fws.gov/northeast/Patuxent/FTP/NWRSCHRON.PDF>

“1934: FDR convened a committee to determine how to save waterfowl during the Dust Bowl era. Aldo Leopold, cartoonist J.N. "Ding" Darling, and publisher Thomas Beck suggested a "duck stamp" to raise funds for acquiring wetland habitat. Congress passed the Migratory Bird Hunting and Conservation Stamp Act ("Duck Stamp" Act). 1935-36: "Ding" Darling, head of the U.S. Biological Survey (the predecessor agency of the U.S. Fish & Wildlife Service), sent biologist J. Clark Salver to identify prime wetlands nationwide. The 600,000 acres he purchased became over 50 refuges, including Red Rock Lakes (MT) for trumpeter swans and Agassiz (MN) for waterfowl.

USFWS. 1993. Red Rock Lakes NWR Visitor Map and Recreation Guide. US Government Printing Office.

Official Refuge brochure: Opening paragraph: *“Red Rock Lakes National Wildlife Refuge was established in 1935 to protect the rare trumpeter swan.”*

USFWS. Current in 2008. Trumpeter Swan, wildlife species information. species.fws.gov/species_accounts/bio_swan.html

“In 1932, fewer than 70 trumpeters were known to exist worldwide, at a location near Yellowstone National Park. This led to the establishment of Red Rock Lakes National Wildlife Refuge in 1935”