## Klamath Basin Coalition Briefing Paper

## Why Commercial Agriculture on the Klamath Basin's National Wildlife Refuges Provides \*\*No Benefit to Wildlife\*\*

In the debate over how to balance the many competing demands for water in the arid Klamath Basin, one fact is certain: we have simply promised too much of this precious resource to too many interests. Any long-term solution to the Basin's woes must focus on reducing the demand for water.

A key first step should be ending the practice of leasing land actually on Klamath Basin National Wildlife Refuges for commercial agriculture. *Nowhere else is commercial row-crop agriculture allowed in a national wildlife refuge*. This simple and inexpensive step could reduce water demand within the massive Klamath Irrigation Project by 10%, freeing up at least 50,000 acre-feet of irrigation water, and entirely using what are already public lands. Restoring these refuges to marsh will also increase the Basin's natural water storage capacity, improve badly degraded water quality and benefit migratory waterfowl.

Irrigation interests have argued against ending commercial farming on refuge lands, claiming the program is good for wildlife. In reality, the lease land program is a sweetheart deal for many irrigators, and creates serious problems for the Basin's wildlife.

- The migrating waterfowl that take refuge in the Klamath Basin evolved to rely on the plants, seeds, and insects naturally occurring in marshes. Commercial agricultural operations, driven by the bottom line of individual irrigators, are a poor substitute for the essential food and shelter of natural wetlands. Out of the hundreds of bird species dependent upon the Klamath Basin National Wildlife Refuge (NWR) system, only geese, mallards, and pintail ducks are known to commonly feed on grain crops. Grains fail to provide essential amino acids as well as shelter for many species of waterfowl and other wildlife. For these reasons, some marshes attract 80% more species than adjacent grain fields. (Fredrickson and Taylor, *Management of Seasonally Flooded Impoundments for Wildlife*, USFWS 1982)
- The California Waterfowl Association apparently supports grain crops on Klamath refuges because these crops function as bait stations for geese, mallards, and pintail ducks during a few weeks of hunting season each year. This has to be balanced against the much greater damage done to a multitude of waterfowl species forced to survive in much-reduced natural habitat.
- Numerous studies published in scientific journals have shown that replacing natural habitats with row crops results in a devastating loss of nesting habitat for many bird species.
- *No crops* are planted on the Sacramento Valley NWRs, which support much larger numbers of waterfowl than the Tule Lake and Lower Klamath NWRs.
- Less than half of the Tule Lake NWR's potential waterfowl habitat is actually available for waterfowl. Not including Tule Lake refuge's 8,476 acres of waterfowl-unfriendly sagebrush and rock outcroppings, 56% of the refuge is instead devoted to commercial agriculture. 49% of the refuge is commercially- leased acreage.
- The 1964 Kuchel Act limits row crops (potatoes, onions, and horseradish) on the refuges to 25% of total refuge crops. For this reason, the Klamath refuges' total grain crop acreage is maximized not to serve waterfowl needs, but to maintain lucrative potato and onion acreage at the highest level possible under the 25% cap.

- The diverse waterfowl species dependent upon the refuges require a range of water depths, from a few inches to a few feet deep. (Fredrickson and Taylor, *Ibid.* 1982) More commercial crop acreage means there is less actual refuge acreage to provide the necessary diversity of water depths. The lack of depth diversity on Tule and Lower Klamath refuges–often lacking any water at all because of irrigation demands–forces diving ducks elsewhere.
- The lack of wetlands on Tule Lake NWR has resulted in a critical lack of food for many duck species, such as the canvasback, shoveler, gadwall, teal, and several diving ducks.
- Farming activities, such as tilling, planting, mowing, cultivation, irrigation, and pesticide/fertilizer applications, drive birds away and decrease nesting success.
- There is no compelling reason whatsoever to grow pesticide-intensive crops on Klamath's refuges. There is no shortage of potatoes, onions, horseradish, hay, or barley in the Klamath or anywhere else the nation. Meanwhile, compelling reasons to protect our nation's dwindling waterfowl habitat, especially along key migratory flyways, increase with each passing year.
- Known carcinogens, neurotoxins and endocrine disruptors were included in the 56 pesticide products approved for use on the NWR's in 2002. Some of these pesticides are so toxic the Environmental Protection Agency has ruled it unsafe for large mammals (such as humans) to enter such fields until 24 to 72 hours after treatment. How safe is it for waterfowl and other wildlife to enter these fields?
- Pesticides sicken and fatally poison waterfowl, while decimating the insects they rely upon for food. Pesticides also eradicate the wild plant habitats of waterfowl.
- Restoration of native habitat in the refuges requires only adding water. The native seed bank remains underground, and will return once the pesticides and tractors depart. While the cost of restoration will be minimal, the benefits will be substantial.

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