Southern Idaho Wildlife Mitigation Implementation

Annual Report 2001

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Southern Idaho Wildlife Mitigation Implementation

**2000 Annual Report for
Project No. 1995-057-01
Contract No. 00000386-00001**

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January 2002

This report covers calendar year 2001 activities for the Southern Idaho Wildlife Mitigation Implementation project. This project, implemented by Idaho Department of Fish and Game and Shoshone Bannock Tribes, is designed to protect, enhance and maintain wildlife habitats to mitigate for construction losses associated with Anderson Ranch, Black Canyon, Deadwood, Minidoka and Palisades hydroelectric projects. Additional project information is available in the quarterly reports.

Project Background

The following table provides an overview of individual wildlife mitigation projects that have been implemented by Southern Idaho Wildlife Mitigation Project cooperators through calendar year 2001.

Project Name	County/Dam	Year	Manager(s)	Acres	HEP	HU
Winterfeld easement	Bonneville/Palidades	1997	IDFG&SBT	422	Yes	383
Kruse easement	Bonneville/Palisades	1997	Teton Regional Land Trust	800	Yes	813
Menan (K1) acquisition	Bonneville/Palisades	1997	IDFG&SBT	140	Yes	317
Noxious Weed Project	Bonneville,Jefferson &Madison/Palidades	1997	IDFG&SBT	Up to 10,000	NA	499
Beaver Dick acquisition (K2)	Madison/Palisades	1997	IDFG&SBT	310	Yes	901
Quarter Circle "O" acquisition	Bonneville/Palisades	1997	IDFG	1/3 of 2,135	Yes	1,254
Soda Hills acquisition	Caribou/Palisades	1998	SBT&IDFG	2,563	Yes	3,896
Big Cottonwood WMA habitat enhancement	Cassia/Minidoka	1998	IDFG	230	Yes**	122
Deer Parks	Bonneville/Palisades	1999	IDFG&SBT	2,556	Yes*	6,918
Krueger	Ada/Black Canyon	1999	IDFG	166	Yes*	57
Rudeen acquisition	Power/Palisades and Minidoka	2000	SBT	2,450	No	2,002

*Field work completed, data analysis in progress.

**Baseline HEP completed, enhancement HU's will be credited when project is completed.

HEP Analyses

HEP field data collection has been completed for all projects except the Rudeen acquisition. GIS analysis of the Deer Parks field data is in progress. The reports for the Big Cottonwood and Krueger projects are in progress.

Management Activities at Individual Projects

Winterfeld Conservation Easement

This project is a conservation easement on a privately owned farm. The easement is held by the Idaho Department of Fish and Game. A conservation easement inspection completed in 2001 confirms that all terms of the easement are being observed. Sharp-tailed grouse leks were again surveyed on and near the property in April-May 2001 and two of the three leks surveyed were active. There was considerable elk use of the property in early spring and again in early winter. Bald eagles are commonly observed flying over the property. Peregrine falcon activity has also been observed in this area of Pine Creek canyon. The location of a possible nest site is being investigated.

Kruse Conservation Easement

This project is a conservation easement on a privately owned farm. The easement is held by the Teton Regional Land Trust. A conservation easement inspection completed in 2001 by TRLT staff confirms that all terms of the easement are being observed. An IDFG biologist surveyed the property again in 2001 for sharp-tailed grouse leks. Grouse activity was observed at one location on the property, in the same general area where activity has been suspected in previous years. Elk, mule deer, ruffed grouse, sandhill cranes, and coyote are commonly observed on the property. Bald eagles are commonly observed flying over the property. Peregrine falcon activity has also been observed in this area of Pine Creek canyon. The location of a possible nest site is being investigated.

Deer Parks Complex

The Deer Parks Complex is composed of the Menan, Beaver Dick and Deer Parks wildlife mitigation units. O&M is funded under Contract No. 00000654-00001.

Menan Wildlife Mitigation Unit

The main activities on this parcel in 2001 were restoring permanent cover to the old farm fields and noxious weed control. The 35-acre field was reseeded in late April 2001. The seed mix included thickspike wheatgrass, streambank wheatgrass, pubescent wheatgrass, Basin wildrye, alfalfa, and Wood's rose. The streambank and pubescent wheatgrass were specifically included as they are highly competitive with noxious weeds, which are common on adjacent lands. The fields were fully irrigated twice during early summer. The seeding will be monitored in 2002 to determine whether the plants become established.

Noxious weeds were controlled using herbicides, biological control releases, and hand pulling within the newly seeded field. Three colonies of biological control insects were released for Canada thistle. Eight colonies of biological control insects were released for leafy spurge. The effects of these insects is starting to be evident in the release sites from 1998-1999. One early

release site was evaluated for potential as an insectary, but we determined the insect population had not built up enough yet to begin collecting at the site. Chemical control remains an important noxious weed control tool, especially for Russian knapweed. No purple loosestrife was found on the property in 2001.

Other activities included maintaining boundary fences, signs, improving the entry area, and installing a cable gate at the bridge. Observations by managers indicates that recreational activity increased substantially at this property in 2001, including hunting, fishing, and walking. Compliance with the motorized access restriction has been good overall, although there are occasional problems. The natural regeneration of willows and cottonwoods continues to progress very well. Coordination with BLM and other IDFG staff to complete the management plan continued, including development of an access management plan.

Beaver Dick Wildlife Mitigation Unit

Activities on this parcel included noxious weed control, maintaining perimeter fences and boundary signs, and maintaining goose nesting platforms. Noxious weed control activities included release of biological control insects for leafy spurge (seven insect colonies), and Canada, musk, and plumeless thistles (nine insect colonies). Weeds treated chemically included leafy spurge, the thistles, and purple loosestrife. Biological control insects were released in the large infestation of purple loosestrife across the Henrys Fork Snake River in 2001. The sloughs and riverbank were thoroughly searched for purple loosestrife twice during the bloom: isolated plants were pulled or sprayed.

The osprey nest was again successful. Three of the four goose nesting platforms were used, two of them successfully. A family of seven juvenile short-eared owls was observed several times in late summer and is believed to have nested somewhere on the property. Despite the very dry summer, the main slough held water all summer and several of the smaller sloughs had water until late August. We plan to repair the water control structure on the main slough in 2002; that should help hold water in many of the minor sloughs also. Leopard frogs and painted turtles were commonly observed around the sloughs. The natural willow regeneration is doing very well on portions of this property.

The IDFG biologist met on several occasions with BYU-Idaho (formerly Ricks College) staff and faculty interested in doing some monitoring and student projects on the property. BYU-Idaho purchased the adjacent Spaulding property in 2001, which borders the Beaver Dick Unit on the north. As BYU-Idaho now borders the property on three sides, we continue to coordinate closely on management issues, especially recreational use and access. Recreational activity increased somewhat at this property in 2001, including hunting, fishing, horseback riding, and walking. Compliance with the motorized access restriction has been excellent, due in large part to the assistance of BYU-Idaho staff and students. Coordination with BLM and other IDFG staff to complete the management plan continued, including development of an access management plan.

Deer Parks Wildlife Mitigation Unit

The Deer Parks Wildlife Mitigation Unit (DPWMU) was under a lease-back agreement to the previous owner until March 2001. Beginning in March, a permanent employee of IDFG was

assigned to Deer Parks WMU; thus, direct management of the WMU was initiated. The following narrative describes management activities and list accomplishments realized at Deer Parks WMU during the year 2001. This report follows the management objectives and goals outlined in the Draft Deer Parks WMU Management Plan. Specific goals outlined in the management plan that are treated below are:

1. Manage and enhance wildlife habitat through passive and active habitat restoration, control of noxious weeds, habitat and species monitoring, and sharecropping.
2. Enhance public recreational opportunities by providing brochures and maps, and developing access points.
3. Strive to maintain good working relations with neighbors by signing the property boundary, maintaining common fences, and minimizing wildlife depredations on private land.

Preliminary Cleanup:

One of the important activities of the first year of management at DPWMU was the cleanup and repairs of grounds and facilities. Restoration of buildings and cleanup of adjacent grounds were necessary before many other day-to-day activities were possible. More than 300 hours of labor were dedicated to such tasks as removing trash from work facilities and renovation of electrical and plumbing systems. Some of the irrigation equipment, essential to the management of the WMU, was inoperable and required considerable time and expense to be returned to functioning condition.

Habitat Management:

Noxious weed control is an important habitat management activity. Noxious weed species found and treated with control measures this year were: leafy spurge, purple loosestrife, Russian knapweed, Canada thistle, musk thistle, and plumeless thistle. Noxious weed management activities included spraying with herbicide, introduction of biological control insects, and physical removal and burning of flowers and plants. Approximately 150 acres of land were treated with various herbicides for the control of all the above-listed noxious weed species. Five species of insects intended to control noxious weeds were released on eight separate occasions. Weed species targeted through releases of insects were purple loosestrife, leafy spurge, Canada, musk, and plumeless thistles. Approximately 90 acres of land were searched on foot to locate noxious weeds in seed. Canada and musk thistle, and Russian knapweed plants that were nearly ready to seed were pulled from the ground and burned.

Sharecropping is another habitat management activity. Alfalfa hay, wheat, and corn were farmed on 370 acres of land at Deer Parks WMU. These crops were farmed under a sharecrop system in which 76 acres of unharvested wheat were left standing to provide food and nesting cover for wildlife. One hundred and thirty acres of wheat stubble were left unburned and untilled in the fall to provide waste grain for migrating waterfowl and doves. Fifty acres of 3-ft high alfalfa were left standing in the fall to provide winter forage, and spring nesting cover. Corn stubble was left standing on 112 acres of land to provide food for migrating birds and for big game, principally white-tailed deer. As part of the sharecrop agreement, fifteen acres of former cropland were planted to permanent cover. Conversion to perennial vegetation will provide long-term cover and feeding areas without the need for further irrigation or tillage.

Habitat and wildlife monitoring activities were initiated in 2001. Twenty-one permanent vegetation monitoring plots were established and surveyed in four habitat types. These plots provide baseline data from which to monitor future changes in habitat. Thirty permanent photopoints were established and photographed to aid in identifying long-term trends in habitat conditions. A waterfowl survey route was established and surveyed throughout 2001. Annual waterfowl surveys will aid in determining trends in numbers of migrating and breeding waterfowl, and assess the effectiveness of habitat manipulations designed for the benefit of waterfowl.

Enhance public recreational opportunities:

More than 1.7 miles of old fence that surrounded Butte Slough were removed. The fence had originally been built for a muskrat farm and blocked human access as well as movement by terrestrial mammals. Approximately 300 hours of labor were dedicated to this project. Two pedestrian access gates were built that allow foot traffic onto Deer Parks WMU but restrict entrance by livestock and motor vehicles. Information on Deer Parks was provided to the public to enhance recreational opportunities in the area while still protecting wildlife habitat values. The boundary of Deer Parks WMU was marked with signs to identify the perimeter. An entrance sign was built and installed at the Deer Parks WMU headquarters identifying the area and project cooperators. Maps of the area were developed and provided to the public in map boxes installed at popular access points. One of the residences at Deer Parks WMU was remodeled and brought up to Americans with Disabilities Act standards to provide an office for management staff as well as a place to provide information to the public.

Strive to maintain good working relations with neighbor:

As mentioned above, boundary signs were placed around the perimeter of Deer Parks WMU, in part to distinguish the common boundaries between private and public lands. Under the sharecrop agreement, some crops were left standing to provide forage for wildlife (moose, deer, waterfowl) to minimize depredations to neighboring landowners. Deer Parks strives to maintain fences and thus prevent conflicts with neighbors. Numerous fence repairs were undertaken during the summer to reduce livestock trespass, and plans are being developed to replace the entire boundary fence.

Quarter Circle Project (Wildlife Habitat O&M Contract No. 00000653-00001)

Habitat enhancement on the QCO property began in early April to continue to establish permanent wildlife habitat on former cropland. This project has several partners including BPA, IDFG, Natural Resources Conservation Service (NRCS) and Rocky Mountain Elk Foundation (RMEF). Thirty-three thousand bitterbrush seedlings were planted using fabric mulch, fertilizer paks and rootdip to augment the previous plantings. This combination works well without supplemental watering and there was an estimated 90% survival of the seedlings from spring through late fall. Most plants were very robust and had grown considerably. Plants from previous efforts continue to show good survival and often exceptional growth. Weed competition is becoming a problem that will have to be addressed in the spring of 2002.

Areas not planted with shrubs were fallowed again all summer. This was an extensive and expensive process. As part of this process, Bonneville County brought in spray equipment and

sprayed the edges of the fields and roads where cheatgrass was prevalent. This procedure will likely be followed again for several more years.

Seed drilling commenced in November and was completed within 10 days. Six different seed mixes were used to accomplish various objectives. Shrub seed and extra forb seed were added to the planting mix for about 120 acres to develop more native-like vegetation for wildlife habitat.

Soda Hills Project (Wildlife Habitat O&M Contract No. 00000656-00001)

The Shoshone-Bannock Tribe is responsible for management of this project and the annual report will be provided by them in a separate document.

Palisades Mitigation Noxious Weed Control Project

The focus of the Palisades Mitigation Project (PMP) is to enhance or recover wildlife habitat by reducing the impact of noxious weeds through the use of biological control agents. A long-term goal is to establish insectaries throughout the watershed on several species of noxious weeds. The PMP Steering Committee has established and administers a cost-share program, developed a project evaluation process, and continues to monitor release sites. The project cost-shares directly with landowners and agencies.

During 2001 fifteen species of biological agents, (475 colonies), were released. The PMP has assisted partners within the Upper Snake River Coordinated Weed Management Area (USRCWMA) to place over 2,870 colonies of plant-specific biological control agents on leafy spurge, spotted knapweed, Canada thistle, musk thistle, purple loosestrife, and yellow toadflax.

The beneficial impact of the leafy spurge flea beetles in the Pine Creek and Dry Creek watersheds and in portions of the Moody Creek watershed is striking. Where the insect is well established leafy spurge has been significantly reduced. Surplus insects at Pine Creek and Dry Creek insectaries were collected and redistributed along the South Fork last summer. During 2002 flea beetle insectaries will be harvested for the first time along Moody Creek and the surplus insects redistributed throughout that watershed.

Since 1998 participants have saved \$103,374 by combining orders for control insects in the PMP and have greatly accelerated the application of biological control. All PMP projects require at least a 50:50 match in cash, labor, or materials for all project cooperators.

Big Cottonwood Wildlife Enhancement (Contract No. 00000644-00001)

Weed infestations were identified, mapped, and treated. Shrub-steppe restoration efforts have produced mixed results. Monitoring indicates establishment of desirable native plant species on the 50-acre site has been low due to competition from weedy annuals and three consecutive years of below normal precipitation. Managers will continue monitoring in spring 2002 and consider replanting with a more aggressive mix of grasses and forbs.

The 30-acre shrub-steppe rehabilitation area was burned and chemically treated with Oust® for cheatgrass control in fall 1999. The area was seeded with a grass/forb mix in fall 2000. Initial monitoring indicates cheatgrass control was good throughout most of the site but desirable plant emergence was negligible. The chemical application for cheatgrass control may have affected

plant germination or seedling survival. Plant emergence and species composition will be monitored in spring 2002. The area will be chemically treated with Plateau® in the winter 2002 for localized control of cheatgrass. The area may be replanted in fall 2002 if desirable plant establishment continues to be low.

Pasture rehabilitation was completed in fall 2000 on a 20-acre parcel. Stand establishment was low due to drought and a lack of irrigation water. The parcel will be evaluated in spring 2002 and likely reseeded in fall 2002.

A severely down-cut segment of Big Cottonwood Creek (approximately 200-ft.) was stabilized using juniper revetments in spring 2000 as an IDFG cost-share project. Bank stabilization and willow establishment continues to be good. Restoration efforts were completed on a 100-ft. segment of the creek in spring 2001. Efforts included bank contouring and native willow and cottonwood plantings. Riparian restoration efforts will continue in spring 2002 on a 200-ft segment of the creek impacted by agricultural development.

Krueger Acquisition

IDFG manages this 166-acre property as part of the 35,000-acre Boise River Wildlife Management Area (WMA). In September 2000 the “Hilltop” wildfire burned through part of the WMA, including part of the Krueger property, damaging vegetation and fences. Rehabilitation of damaged vegetation on the Krueger property was done in conjunction with an interagency effort carried out over the larger wildfire impact area. Fences on the property were rebuilt during the same time period. The cost of the rehabilitation effort was funded by BLM as part of their response to the “Hilltop” fire. This provided a significant cost-share benefit to the Krueger project.

Easement Report

Winterfeld Conservation Easement

A conservation easement inspection completed in 2001 confirms that all terms of the easement are being observed. IDFG personnel visited the site in April, May and early winter.

Kruse Conservation Easement

A conservation easement inspection completed in 2001 by TRLT staff confirms that all terms of the easement are being observed.

Accounting of Fund (January – December 2001)

NOTE: Overhead costs are not included. Because each contract period is different and because the IDFG fiscal year is July-June, inconsistencies in cost-accounting occur. Therefore, the amounts below, particularly personnel expenditures, may be slightly imprecise.

Southern Idaho Wildlife Mitigation Implementation (Contract No. 00000386-00001)

Item	Note	Amount spent in 2001
Personnel	Approx. 1.75 FTE Wildlife Mitigation Specialists; administrative help; supervision	\$78,619
Operating	Travel	\$2,144
	Services	\$16,507
	Other (supplies, maps, etc)	\$1,474
Capital Outlay	Office furniture	\$1,250
TOTAL		\$99,994

Deer Parks Wildlife Habitat O&M (Contract No. 00000654-00001)

Expenditures

Item	Note	Amount Spent in 2001
Personnel	IDFG Biologist	\$32,403
	Temporary Employees	\$6,211
Total Personnel		\$38,614
Operating	Equipment/Tools	\$6,661
	Supplies (seed, herbicides, safety)	\$10,084
	Travel	\$559
	Vehicle Rental	\$7,350
	Pump & Irrigation Pivot Repairs	\$9,860
	Other Services	\$717
	Land Maintenance Services	\$1,467
	Insurance	\$340
	Radio Maintenance	\$396
	Utilities	\$3,461
Total Operating		\$40,895
Capital Outlay	Utility trailer	\$1,665
	Tractor weed sprayer	\$2,892
	Tractor	\$33,500
	Refrigerator	\$548
	Dishwasher	\$446
	4WD Pickup truck	\$23,064
	Computers	\$1,505
	Spotting scope	\$206
	Tractor pallet forks	\$975
	Rear tractor blade	\$968
Total Capital Outlay		\$65,769
TOTAL		\$145,278

Revenues

Item	Note	Amount Earned in 2001
Deer Parks Unit Sharecrop agreement	Exchange of hay for services as per sharecrop agreement, and rental of potato cellar.	\$20,035

Quarter Circle O Wildlife Habitat O&M (Contract No. 00000653-00001)**Expenditures**

Item	Note	Amount spent in 2001
Signs	Carsonite sign posts and stickers - \$500	\$500
Habitat Enhancement	Mulch fabric - \$4,953 Weed control - \$209 Labor to plant bitterbrush - \$1,000 Seed - \$5172.50 Custom Drill 250 acres @\$18.00/acre - \$4,500	\$15,834.5
TOTAL		\$16,334.50

Cost-Share

Item	Note	Estimated Dollar Value in 2001
Personnel	IDFG Habitat Biologist (25 days)	\$6,000
Habitat Enhancement	Prepare former cropland for planting to permanent wildlife habitat (IDFG) - \$20,250 Custom Drill 100 acres @ \$18.00/acre-\$1,800 Drill 100 acres (IDFG) \$1,800 Contract labor (IDFG) to Plant 33,000 bitterbrush seedlings: \$3,203.50 fabric mulch (IDFG & NRCS) - \$5,000 Herbicide spraying by Bonneville County (IDFG) - \$250 fertilizer paks (IDFG) - \$1,200 bitterbrush seedlings (IDFG) - \$7,314.86 grass & forb seed (RMEF) - \$ 10,000 IDFG vehicle rental - (2,000 miles @ \$.325) \$650	\$51,468.36
TOTAL		\$73,802.86

Big Cottonwood Wildlife Enhancement (Contract No. 00000644-00001)

Expenditures

Item	Note	Amount spent in 2001
Personnel	1 temporary bio-aide	\$6,554
Operating	Equipment, materials, and supplies	\$647
	Equipment service, repair, and fuel	\$97
	Tractor and IDFG vehicle rental	\$2,737
	Seed/seedbed preparation (including contracted services)	\$280
	Noxious weed control (herbicide, contracted services)	\$1,993
TOTAL		\$12,308

Cost-share

Item	Note	Estimated Dollar Value
Personnel	IDFG manager, license-dollar funded (approx. 85 hours plus benefits)	\$2,231
TOTAL		\$2,231

Krueger Addition to Boise River WMA (Contract No. 00005521)

Expenditures

Item	Note	Amount spent in 2001
	No expenses in 2001	

Cost-share

Item	Note	Estimated Dollar Value
Personnel	IDFG Habitat Biologist (5 days)	\$ 1,200
	IDFG temporary Bio-aide to collect and clean native plant seed (5 days)	\$ 440
Operating	BLM funded wildfire restoration (estimate includes vegetation rehabilitation and fence repair)	\$10,000
TOTAL		\$11,640