FEDERAL AID ANNUAL PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME DIVISION OF WILDLIFE CONSERVATION PO Box 115526 Juneau, AK 99811-5526

Alaska Department of Fish and Game Wildlife Restoration Grant

Grant and Segment No. AKW-4 Wildlife Restoration FY2015

Project No.: 11.0

Project Title: Migratory Game Bird Annual Survey and Inventory: Status, Trends, and Public

Use of Migratory Game Birds in Alaska.

Project Duration: July 1, 2014 – June 30, 2015

Report Due Date: September 30, 2015

Partner: Numerous

PRINCIPAL INVESTIGATOR: Dan Rosenberg

COOPERATORS: Mike Petrula, Jason Schamber, Kyle Smith

WORK LOCATION: Statewide (Regions 1, 2, 3, 4 and 5)

REPORT DESCRIPTION: This performance report describes the Statewide Waterfowl Programs survey and inventory activities. Activities are listed by geographical region.

Project Activities and Accomplishments

Project Location: Statewide

Objective: Develop ADF&G FY 15 work plan/budget request consistent with high priority management needs, federal activities, and state objectives.

Accomplishments: The FY 2015 Waterfowl Program annual work plans and budgets were developed through analysis of migratory game bird status information, identification of management needs and issues, management plans, and assessment of the department's capabilities and role in addressing needs relative to programs by U.S. Fish and Wildlife Service (USFWS), the Alaska Migratory Bird Co-management Council (AMBCC), U.S. Geological Survey-Biological Resources Division (USGS-BRD), U.S. Forest Service, Joint Ventures, and wildlife agencies of other states. The primary source of status information and process for determining the department's work plans was through the Pacific Flyway Council (PFC) and Study Committee (PFSC). The department actively participated in flyway communications, data exchanges, work sessions, and formal biannual meetings. Waterfowl Program staff also participated in many coordination meetings, technical discussions, and planning functions with the AMBCC, USFWS Region 7, USGS-BRD Alaska Science Center, U.S. Forest Service (USFS), University of Alaska, Canadian Wildlife Service, and the Sea duck and Arctic Goose

Joint Ventures to identify migratory bird issues and develop cooperative projects in Alaska.

Objective: Participate in meetings of the PFC and PFSC and AMBCC; complete revisions of high-priority management plans; review and recommend 2015–16 hunting regulations for sport and subsistence.

Accomplishments: Alaska played an active role on the PFC (Bruce Dale) and PFSC (Dan Rosenberg). The Waterfowl Program Coordinator (Coordinator) served on the Pacific Flyway Study Committee and represented the Pacific Flyway on the Arctic Goose Joint Venture and the Harvest Management Working Group. The Coordinator chaired subcommittees to update management plans for dusky Canada geese, emperor geese and mid-continent greater white-fronted geese. The Coordinator also served on subcommittees to review and edit plans and coordinate management activities for Brant, cackling geese, Pacific white-fronted geese and Tule geese, Aleutian, Taverner's, lesser, and Vancouver Canada geese, lesser snow and Ross' geese, and western and eastern tundra swans. The Coordinator recommended early-season regulations for sport hunting in Alaska to the Council and USFWS. The Coordinator integrated and coordinated PFC activities with the AMBCC and worked closely with the Executive Director and committee members to develop and review proposals and incorporated the AMBCC in the revision of the Pacific Flyway emperor goose management plan.

During this reporting period, the Coordinator and waterfowl program staff worked with the Pacific Flyway to revise the dusky Canada goose and midcontinent white-fronted goose management plans for adoption in FY16, and improved population estimates to address conservation concerns for dusky Canada geese, liberalized harvests of Pacific white-fronted geese and removed permit restrictions for dusky Canada goose Canada geese. We continued working with the USFWS, North Slope Borough and AMBCC to implement harvest regulations that meet the needs of local residents while minimizing the incidental harvest of Steller's eiders and yellow-billed loons.

Objective: Participate in meetings of the Alaska Board of Game and review and recommend actions on proposals to the 2014-15 hunting regulations and develop emergency regulations. Maintain waterfowl guide registration program.

Accomplishments: The Program Coordinator advised and recommended actions for proposed waterfowl regulatory changes to the Alaska Board of Game (BOG) to reduce bag and possession limits for goldeneyes and implement a mandatory harvest reporting system; drafted emergency waterfowl regulations for the Department of Law; developed press releases to announce regulatory changes; and edited the ADF&G waterfowl regulations booklet. Staff issued waterfowl hunting guide registration cards and maintained the hunting guide database.

Objective: Develop funding opportunities and coordinate with partners to achieve objectives of the Sea Duck Joint Venture (SDJV) Strategic Plan and the Arctic

Goose Joint Venture (AGJV) Strategic Plan; contributed to research planning, selection, and coordination of management projects; advised management boards, and continued cooperative efforts to develop a population monitoring program for sea ducks.

Accomplishments: Coordinator worked with partners in the U.S. and Canada to review and recommend sea duck research and management projects to update objectives in the 2008-2012 SDJV Strategic Plan. Staff is analyzing results of a 2012–2014 population monitoring program in Southcentral Alaska last surveyed in 2003 and continued to monitor results and data analysis of a population delineation project in cooperation with the USFWS, USGS, and Canadian Wildlife Service that marked Barrow's goldeneyes in Southeast, AK with satellite transmitters in 2012 and expanded to Kachemak Bay, AK in FY13 and 14 (see below). Staff began a new satellite telemetry project in April 2015 at Nelson Lagoon to further study the movements and distribution of black scoters. Coordinator worked with partners in the U.S., Canada, and Russia to review and recommend Arctic Goose research and management projects and update objectives in the AGJV Strategic Plan. Program coordinator worked cooperatively with the USFWS, State of Washington, and Russian biologists to conduct a satellite photography project to assess the population status of Wrangel Island snow geese. Program coordinator worked with the AGJV Management Board to develop management and communications strategies for overabundant light geese.

Objective: Band ducks at several sites to meet Pacific Flyway regional duck banding objectives in conjunction with staff, USFWS, and other banders.

Accomplishments: The Waterfowl Program continued its duck banding effort at Minto Flats State Game Refuge and in Anchorage (see Regional–Interior and Southcentral). We established goals for operational banding needs in Alaska and other states as part of the PFSC and PFC, and the USFWS Adaptive Harvest Management Models for western Mallards and northern pintails. This involved collaboration with USFWS Region 7 to define banding needs and apply banding and harvest data to regulatory prescriptions in Alaska and the Pacific Flyway states.

Objective: Evaluate results of 2013 HIP surveys to estimate harvest in Alaska and monitor 2014 enrollments for adequate hunter registration. In collaboration with USFWS, staff evaluated survey sampling design and harvest estimation methods, with an emphasis on development of effective surveys for harvest of sea ducks, brant, and sandhill cranes.

Accomplishments: Waterfowl Program staff collaborated with ADF&G Licensing Section and FWS to implement the Harvest Information Program (HIP) in Alaska. This included design and printing of state duck stamps and contracting for production of HIP cards in state duck stamp vendor booklets, evaluation of survey design, improving performance of state license vendors in submitting enrollment cards, and answering numerous inquiries from ADF&G staff, license vendors, and the public. We continued to compile HIP enrollment data and to assess trends in migratory bird harvest and hunter activity statewide. Hunter enrollment cards and duck stamps are distributed to licensed vendors in time for the spring subsistence season.

Objective: Program Coordinator serves as the technical representative to the Alaska Migratory Bird Co-management Council (AMBCC). Attend meetings of the AMBCC, regional committees, and public meetings statewide; provide technical information on bird populations and harvest and conservation issues; assist with implementation of the statewide subsistence harvest survey; collaborate with regional management committees

and FWS to expand and improve subsistence harvest management strategies for spring/summer subsistence seasons.

Accomplishments: The ADF&G Waterfowl Coordinator and Director Bruce Dale continued work with the Service and 11 Native regional representatives of the AMBCC, participating in regulatory meetings in September, 2015 and April, 2015. Department activities and accomplishments include: (1) serving on the AMBCC Handicraft Committee, Invitation Committee, Transportation Committee, Fall/Winter Harvest Working Group, Standard Operations Procedures Committee and Harvest Survey Committee to develop regulatory proposals and solutions to outstanding regulatory issues and concerns; (2) implementing a federal regulation to allow the sale of handicrafts containing non-edible bird parts and preventing waste of edible bird parts (3) presenting information on the status and trends of migratory bird populations and harvest in Alaska to the AMBCC; (4) assisting with development of 2015 federal subsistence regulations and technical review and analyses of proposals; (5) chairing the Emperor Goose Subcommittee to address a subsistence harvest and revise the Management Plan; and (7) serving as liaison between the AMBCC and PFC including drafting PFC recommendations to support Alaska subsistence harvest regulations. The Program Coordinator participated in the assessment and review of the statewide harvest survey and coordinated with Subsistence Division staff in this process. Program coordinator attend regional management body committee meetings in Bethel. Kodiak, and Dillingham.

Objective: Plan, review, and produce information products on migratory bird resources, conservation issues, and agency management and research programs.

Accomplishments: In the area of public information products, program staff frequently provided answers to questions and technical information to the public, other agencies and conservation groups on a wide variety of topics concerning waterfowl biology, management, regulations, and hunting. Program staff maintains, reviews, and updates department web pages on migratory birds including research projects, endangered species information, and information on migratory bird hunting and regulations. The Coordinator and staff edited and revised the hunter regulations brochure and coordinated with USFWS special agents to assure consistency with federal regulations. Coordinator and staff transmitted technical information on management and research projects to the Pacific Flyway, at state and federal coordination meetings, and scientific conferences.

Objective: Work cooperatively with other state and federal agencies, non-governmental organizations, and divisions and programs within ADFG to formulate, review, evaluate, and comment on land use plans, management plans, resource development plans, the NEPA process, Endangered Species Section 7 consultation, and other state and federal special areas management and regulatory functions.

Accomplishments: Program coordinator and staff have reviewed permit applications for ecological impacts and mitigation strategies for energy development projects (oil and gas, wind, hydroelectric), large scale mining projects, state special area management activities and planning documents, section 7 consultation for development in Steller's and Spectacled eider habitat, NEPA documents for the Izembek National Wildlife Refuge and the Chugach National Forest Land Management Plan. Coordinator and staff provided

recommendations to the scoping process for the revision of the State Comprehensive Wildlife Conservation Strategy.

Regional - Northern and Western:

Objective: Restore cackling Canada geese to 250,000 and emperor geese to 80,000. Maintain the status of other waterfowl above population objective through Y-K Goose Management Plan and Pacific Flyway Council. Monitor the harvest of Tundra Swans.

Accomplishments: The Program Coordinator represented the Department at meetings of the Waterfowl Conservation Committee of the Association of Village Council Presidents and is working collaboratively on efforts to revise the Yukon-Kuskokwim Delta Goose Management Plan, the Pacific Flyway Emperor Goose Management Plan and the Pacific Flyway Brant Management Plan and the joint Pacific, Central, and Mississippi flyways Mid-continent White-fronted Goose Management Plan. The Y-K Delta Goose Management Plan has expired and is up for renewal. It remains in effect by continuing agreement. The Waterfowl Coordinator, members of the PFSC, the Oregon Farm Bureau, the USFWS, and the AVCP Waterfowl Conservation Committee continued to meet to discuss population status and changes to the Management Plan and resolve management concerns regarding cackling geese survey methodologies, population estimates and objectives, and harvest strategies through the AMBCC, PFSC, and PFC processes as well as resolve issues of agricultural crop depredation while maintaining adequate subsistence opportunities.

The Program Coordinator, working with the Pacific Flyway and AMBCC has reassessed the population status of Cackling Canada Geese which now meet population objectives. The Department maintains it commitment to the Y-K Delta Goose Management Plan that supports populations necessary for subsistence hunting. Working within the framework of the AMBCC, the Waterfowl Coordinator has kept Native Regional Representatives informed of the process to revise Pacific Flyway management plans for pacific Brant and mid-continent white-fronted geese, and is working cooperatively with the AMBCC to revise the Emperor Goose Management Plan.

In conjunction with area staff, program staff manages and reports to the Pacific Flyway on results of Tundra Swan permit hunts in GMU's 17, 18, 22, and 23.

Objective: Participate on the Spectacled/Steller's Eider Endangered Species Recovery Teams; assist in implementation of Recovery Plans; cooperate in development and implementation of effective population assessment and recovery tasks. Update annual work priorities on the Steller's Eider and Spectacled Eider Recovery Plans.

Accomplishments: As a member of the Recovery Teams, Staff has worked with the Steller's and spectacled eider teams to update annual work plans and funding priorities, review survey data, and design research projects to address information needs. The Recovery Team has not met in this fiscal year. The Waterfowl Coordinator has coordinated with the USFWS Regional Director, the North Slope Borough, and the AVCP on future directions for eider management.

Objective: Work cooperatively with other state and federal agencies and private entities to research waterfowl and habitat on the Arctic Coastal Plain.

Accomplishments: The ADF&G waterfowl program and Conoco Phillips partnered with the US Geological Survey investigating population dynamics of lesser snow geese and black brant on the Arctic Coastal Plain of Alaska. This project was funded by the AGJV. A comparative demographic analysis can inform the Pacific Flyway Council on the potential impact of continued expansion of lesser snow geese and the contribution of black brant colonies to the flyway population, and address questions of how these species interact in a changing environment. In July 2014, staff participated in molt captures and banding of lesser snow geese and black brant at brood rearing areas on the Colville River delta.

Regional - Interior

Objective: Oversee implementation of the Management Plan for Mid-continent White-fronted Geese with Central and Mississippi Flyway states, and affected users in Interior and Northwest Alaska.

Accomplishments: Staff continues to monitor annual status of Interior/ Northwest Alaska breeders in conjunction with the USFWS and review analysis of survival and harvest patterns throughout their range with USFWS and USGS-BRD and reviews hunting regulations with counterparts in the Central and Mississippi Flyways. The program coordinator successfully worked with the Central and Mississippi Flyways to coordinate activities to work towards a revised Mid-continent White-fronted Goose Management Plan.

Objective: Band ducks at Minto Flats State Game Refuge to meet Pacific Flyway regional duck banding targets, in conjunction with other ADF&G staff and USFWS.

Accomplishments: The department has continued to work with Pacific Flyway states to plan and implement a flyway wide duck-banding program to support population modeling of western mallards and northern pintails. Due to flooding, trapping could not be conducted on the Minto Flats State Game Refuge in August 2014 and no ducks were banded.

Regional – Southcentral:

Objective: Maintain dusky Canada geese to prevent ESA listing; progress toward 20,000 birds and annual production of >20% young; implement the Pacific Flyway Management Plan and Focal Species Action Plan.

Accomplishments: Program staff continued to work with Pacific flyway states and USFWS to monitor the population status and harvest of dusky Canada geese. Through the Flyway regulatory process, ADF&G eliminated a registration permit hunt in GMU 6 due to populations increasing above a predetermined threshold in the Management Plan. The Coordinator worked closely with the Chugach National Forest to incorporate dusky Canada Geese as a "species of conservation concern" in the Assessment Phase of the Forest Management Plan Revision and coordinated with the Cordova local advisory committee on the Management Plan revision.

Objective: Produce annual estimates of dusky goose production on Copper River Delta (CRD), monitor population status and production on Middleton Island; develop methods to obtain indices of geese breeding in Prince William Sound (PWS).

Accomplishments: Program staff conducted the annual dusky Canada goose production survey over the west Copper River Delta on July 16, 2014. Individual survey methods and coverage were similar to previous years over the west delta, from Copper River Islands to Point Whiteshed, and Egg Island. We counted 6,702 adults and 1,226 goslings and estimated that 2,452 goslings were present on the west CRD survey area. Production of dusky Canada geese was 26.8%; based on this survey, the Pacific Flyway Dusky Canada Goose Management Plan objective of achieving annual production of 20% young has been met every year since 2008.

The Breeding Ground Index used as the population index of dusky Canada geese includes a biannual count of breeding adults on Middleton Island; conducted in June during the brood rearing period. This biennial effort is directed at documenting growth of this island group and periodically determining its status as part of the dusky Canada goose population. Program staff conducted the biennial survey of Canada geese on Middleton Island from June 17-19, 2014. The next biennial population survey is scheduled for June 2016. In May 2015, program staff initiated a pilot project to estimate abundance of dusky Canada geese on Middleton Island using nest plots. Middleton Island was divided into 42 (~400m × 800m) plots. A crew of six observers searched 10 randomly selected plots and located 298 nests. An abundance estimate (95% CL) will be based on nest density adjusted for observer detection and habitat type.

Objective: Band and mark with neck collars up to 600 dusky geese semi-annually on CRD.

Accomplishments: Program staff in cooperation with the US Forest Service, Pacific Flyway states, and the Canadian Wildlife Service bands adult dusky Canada geese on the west CRD every other year to monitor distribution and estimate survival rates. We conducted 2 molt drives on July 17– 18 and neck collared and banded 299 geese and banded only 333 geese. In addition we recaptured 153 geese banded in previous years. The next banding drive will be in July 2016.

Objective: Monitor satellite-marked Canada geese from Middleton Island and PWS. Deploy additional transmitters as feasible, including a minimum of 15 breeding birds on the CRD.

Accomplishments: To monitor annual movements of dusky Canada geese program staff deployed 66 implantable satellite transmitters (PTTs) in females nesting in Prince William Sound (PWS), Middleton Island (MI), and on the Copper River Delta, Alaska from 2011–2014. Program staff are currently monitoring 26 active PTT's. Data is shared with other Pacific Flyway states and the USFWS.

Objective: Conduct aerial surveys to locate VHF-marked Tule white-fronted geese during the breeding and molting season, and enumerate Tule geese on the principal molting area in Kahiltna Valley and on Cook Inlet coastal marshes.

Accomplishments: As part of a cooperative Pacific Flyway project, in the fall of 2014 and spring of 2015, Program staff coordinated a search for VHF radios deployed on Tule white-fronted geese. Transmitters were deployed by CA and OR state agencies at Summer Lake Wildlife Area, OR. ADF&G conducted a fall telemetry monitoring flight in the Upper Cook Inlet Basin (UCIB) in August 2014 prior to fall migration and detected 21 radios that were deployed in California and Oregon in spring of 2014. A total of 47 radios were available for detection in Alaska during the summer of 2015. Program staff conducted two aerial telemetry flights (May and June) and detected 28 unique radio-collared birds during the nesting period post-nesting period. In cooperation with the USFWS a survey was conducted on the Innoko NWR on July 9, 2014 and detected 1 radio-marked bird and a survey flight of the Muddy Lakes area (Yukon Delta NWR) conducted on August 4 detected 6 radio-marked birds. Results were shared with the Yukon Delta and Innoko National Wildlife Refuges and Pacific Flyway states.

Objective: Continue and expand population surveys and radio telemetry projects to assess the number and seasonal distribution of wintering sea ducks in the Gulf Coast, Kodiak, and Cook Inlet regions; link wintering birds to seasonal use areas.

Accomplishments: As part of a multi-year project program staff conducted boat and aerial surveys of wintering sea ducks in Kachemak Bay from March 2012–2014 to estimate the number and distribution of sea ducks inhabiting the bay during winter. Staff is analyzing survey results for species composition and abundance which will be compared with results from previous surveys conducted form 1999–2003.

Objective: Capture, band, and mark wintering Barrow's goldeneyes in Kachemak Bay, Alaska to study winter movements, distribution, and site-fidelity.

Accomplishments: The waterfowl program led a cooperative Sea Duck Joint Venture Project with the U.S. Fish and Wildlife Service, the Alaska SeaLife Center, and Environment Canada to delineate the population of Barrow's goldeneyes wintering in Southcentral Alaska. Program staff are currently analyzing data on movements, seasonal use locations, and philopatry from satellite transmitted birds marked in Kachemak Bay. Results will be compared with goldeneyes marked on coastal wintering areas in British Columbia, Canada and Southcentral Alaska.

Objective: Assist Region II and IV addressing urban waterfowl management and land use issues.

Accomplishments: Program staff advised and supported the efforts of a citizens group to monitor snow geese and sandhill cranes on the Anchorage Coastal Wildlife Refuge. Program staff addressed land use and habitat issues on the Palmer Hay Flats State Game Refuge including Board of Game action to incorporate state owned parcels into the refuge, and managing motorized access routes to prevent erosion and pond draining. Program staff continued a project implemented in FY14 to assess the health of urban mallards in cooperation with a graduate research project at the University of Alaska Fairbanks. In FY15 we marked 502 birds with metal leg bands and colored tarsus bands to conduct survival analysis and gain information on seasonal movements; and sample

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birds for body condition, genetics, parasites, avian influenza, and food habits (stable isotopes).

Objective: Monitor population status of Vancouver Canada geese transplanted to the Kodiak Archipelago.

Accomplishments: ADF&G in cooperation with the Kodiak NWR implanted 7 Vancouver Canada geese on Shuyak Island with satellite transmitters in 2014. In cooperation with the USFWS we conducted an aerial survey in March 2015 based on satellite transmitter locations and other known wintering sites to monitor the wintering population. We counted 1,816 geese on the east side of Kodiak Island and parts of Afognak Island.

Regional – Southeast:

Objective: Monitor movements of Barrow's goldeneyes captured and marked in Southeast Alaska in FY12.

Accomplishments: As a continuation of a cooperative Sea Duck Joint Venture Project with the U.S. Fish and Wildlife Service, U.S. Geological Survey, Simon Fraser University, and Environment Canadian project begun in FY12 to delineate the population of Barrow's goldeneyes wintering in Southeast Alaska, program staff continued to work with cooperators in FY15 to analyze data and report on results.

Prepared by: Daniel Rosenberg.