Pacific Flyway Council
Recommendations, Informational Notes
and Subcommittee Reports

A product of the March 2017
meetings of the:

Pacific Flyway Nongame
Technical Committee
February 27th to March 3rd, 2017
    Cannon Beach, Oregon

Pacific Flyway Study Committee
February 27th to March 3rd, 2017
    Cannon Beach, Oregon

Pacific Flyway Council
March 7th, 2017
    Spokane, Washington
Preface

The Migratory Bird Treaty Act implemented multiple international treaties addressing migratory bird management and conservation, and established federal authority over migratory birds. The Secretary of the Interior, acting under the authority of the Migratory Bird Treaty Act, is authorized to determine when hunting of migratory game birds can take place in the United States and to adopt regulations for this purpose. This responsibility has been delegated to the U.S. Fish and Wildlife Service (Service). Similarly, the Secretary of the Interior’s authority to regulate the take, use, and conservation of nongame migratory birds has been delegated to the Service. The Pacific Flyway Council (Council) cooperates with the Service to develop regulations for migratory birds in the United States west of the Continental Divide. Both organizations consider the welfare of migratory bird populations first, and then public demands for recreation and subsistence harvest, and other uses.

The Service sets migratory game bird hunting regulations by establishing frameworks, or outside limits, for season lengths, bag limits, and areas for migratory game bird hunting. The Alaska framework is presented as a distinct recommendation inclusive of all species. Season frameworks for individual guilds or species do not apply to Alaska. Members of Council and its technical advisory group, the Pacific Flyway Study Committee (SC), meet in late summer/early fall to disseminate information, share data, review the status of populations and propose annual hunting regulations. They meet again in late winter to develop cooperative management programs, and coordinate research and management for the protection and conservation of migratory game birds. Council typically forwards season framework recommendations to the Service in October.

In 2006, the Flyway system was expanded to provide a consolidated forum for the Service and State fish and wildlife agencies to discuss, plan, and coordinate actions to address nongame migratory bird regulatory issues. To facilitate technical review of nongame regulations and associated issues, a Nongame Technical Committee was created within each flyway.

Recommendations, informational notes, and subcommittee reports are typically prepared by the Study Committee and Nongame Technical Committee (hereafter collectively referred to as Committee[s]), and forwarded to Council for adoption or consideration. The Committees are scientific fact finding bodies whereas Council is an administrative and policy setting body. Council may develop recommendations or modify Committee recommendations to meet Council needs. In cases where a Committee recommendation is forwarded to Council for consideration of adoption, the recommendation is written on behalf of Council. Committee specific recommendations do not need to be adopted by Council. These are formal actions taken by either Committee and forwarded to Council for review. Council has a policy of considering management plans for adoption only after having received the management plan for review at least 45 days prior to their next business meeting. To expedite Council business, all Council recommendations are listed first followed by Committee recommendations, informational notes, and subcommittee reports. Council recommendations are generally ordered with routine frameworks first, special season frameworks second, and other recommendations last. Finally, the Service assumes Council support for continuation of the previous year’s frameworks for which no recommendation is received.

Each recommendation and informational note identifies a contact person. The contact person does not necessarily endorse, but rather volunteers to write the recommendations or informational notes that represent the position of the Committee or Council. The contact person is usually knowledgeable on the subject matter and serves as a contact if there are any questions. If either Committee establishes a subcommittee to address specific actions, the subcommittee is identified on recommendation or informational notes they initiate. The Chair of each subcommittee prepares the subcommittee’s report and is identified on that report.
# Table of Contents

**Preface**

**Members, Officers, and Representatives**  
Pacific Flyway Council ........................................................................................................ iv  
Pacific Flyway Study Committee ......................................................................................... v  
Pacific Flyway Nongame Technical Committee ..................................................................... vi  
Representatives to the Pacific Flyway Council and Technical Committees............................ vi

**Recommendations**  
Allocation of Wyoming Wetlands Society Trumpeter Swans to Approved Release Sites ........... 9  
Amendment to the 2017 Budget .............................................................................................. 11  
Draft Environmental Assessment for Resident Canada Geese .............................................. 13  
Funding Request for the Rocky Mountain Population of Trumpeter Swans Fall Survey ........... 15  
Harvest Management Working Group Priorities ..................................................................... 17  
Letter to Bruce Peterjohn, Bird Banding Laboratory ............................................................. 19  
Letter to Leonard Jordan Regarding Natural Resources Conservation Service Wetland Determination Methods in the Prairie Pothole Region ...................................................... 23  
Letter to U.S. Fish and Wildlife Service Regarding Inclusion of the Pacific States in the Depredation Order for Take of Double-crested Cormorants ................................................... 26  
Letter to the U.S. Fish and Wildlife Service Regarding Permitting Requirements .................. 27  
Letters of Appreciation to Mike Green and Andrea Hanson .................................................. 30  
Study Committee Representation Assignments ....................................................................... 35

**Informational Notes**

Banding Subcommittee Creation ............................................................................................. 42  
Canadian Wildlife Service Briefing to the Pacific Flyway Study Committee ......................... 44  
Data Sharing .......................................................................................................................... 45  
Human Dimensions Working Group Stakeholder Survey Update .......................................... 49  
Pacific Flyway Nongame Technical Committee Recent Activities and Products, Status of Council Products, and Work Plan ..................................................................................... 52  
Pacific Flyway Representation on the Avian Knowledge Network Steering Committee .......... 55  
Pacific Flyway Study Committee Management Plan Meeting Summaries .............................. 56  
Rocket Net Propellant ........................................................................................................... 60  
Southern Wings Projects ....................................................................................................... 61  
Support for Western Arctic Population Lesser Snow Goose Banding on Banks Island .......... 66  
Take Allocation of Peregrine Falcons for Falconry Purposes in the United States West of 100° Longitude ......................................................................................................................... 68

**Subcommittee Reports**

Aleutian Canada Goose Subcommittee .................................................................................. 70  
American White Pelican Subcommittee .................................................................................. 71  
Banding Subcommittee .......................................................................................................... 73  
Double-crested Cormorant Subcommittee ............................................................................. 75  
Dusky Canada Goose Subcommittee ....................................................................................... 80  
Eagles Subcommittee ............................................................................................................. 81  
Lesser, Taverner’s, and Vancouver Canada Goose Subcommittee .......................................... 83  
Pacific Brant Subcommittee ................................................................................................... 84
Members, Officers, and Representatives

Pacific Flyway Council

Members
Bruce Dale, Alaska Department of Fish and Game
Josh Avey, Arizona Game and Fish Department
Stafford Lehr, California Department of Fish and Wildlife
Craig McLaughlin, Colorado Parks and Wildlife
Jeff Gould, Idaho Department of Fish and Game
Ken McDonald, Montana Fish, Wildlife and Parks
Tony Wasley, Nevada Department of Wildlife
Kevin Blakely, Oregon Department of Fish and Wildlife
Mike Fowlks, Utah Division of Wildlife Resources
Eric Gardner, Washington Department of Fish and Wildlife

Officers
Chair, Eric Gardner, Washington
Vice-chair, Josh Avey, Arizona
Secretary, Brandon Reishus, Oregon
Treasurer, Jeff Knetter, Idaho

Consultants to U.S. Fish and Wildlife Service Migratory Bird Regulation Committee
Kevin Blakely, Oregon
Mike Fowlks, Utah

Representative on the National Flyway Council
Mike Fowlks, Utah

Representative on the North American Wetlands Conservation Council
Ken McDonald, Montana

Representative on the AFWA Migratory Wildlife Committee
As appointed

Representative on the North American Waterfowl Management Plan Committee
Dan Yparraguirre, California

Representative on the Hunter Recruitment and Retention Strategy Team
Vacant

Representative on the Cooperative North American Shotgun Education Program
Vacant

Representative on the Sea Duck Joint Venture Management Board
Eric Gardner, Washington
Representative on the Arctic Goose Joint Venture Management Board
Bruce Dale, Alaska

Representative to the Alaska Migratory Bird Co-management Council
Stafford Lehr, California

Pacific Flyway Study Committee

Members
Jason Schamber, Alaska
Johnathan O’Dell, Arizona
Melanie Weaver, California
Jeff Yost, Colorado
Jeff Knetter, Idaho
Claire Gower, Montana
Russell Woolstenhulme, Nevada
Brandon Reishus, Oregon
Blair Stringham, Utah
Kyle Spragens, Washington

Officers
Chair, Kyle Spragens, Washington
Vice-chair, Johnathon O’Dell, Arizona
Treasurer, Jeff Knetter, Idaho

Subcommittees
Aleutian Canada Goose
Banding
Cackling Canada Goose
Dusky Canada Goose
Emperor Goose
Interior Band-Tailed Pigeon
Lesser, Taverner’s, and Vancouver Canada Goose
Lower Colorado River Valley Sandhill Crane
Mourning and White-Winged Dove
Pacific Brant
Pacific Coast and Central Valley Sandhill Crane
Pacific Coast Band-Tailed Pigeon
Pacific Trumpeter Swan
Pacific/Rocky Mountain Western Canada Goose
Rocky Mountain Sandhill Crane
Rocky Mountain Trumpeter Swan
Western and Eastern Tundra Swan
White Geese
White-Fronted Goose
Pacific Flyway Nongame Technical Committee

Members
Travis Booms, Alaska
James Driscoll, Arizona
Carie Battistone, California
Colleen Moulton, Idaho
Allison Begley, Montana
Cris Tomlinson, Nevada
Andrea Hanson, Oregon
Russell Norvell, Utah
Joseph Buchanan, Washington

Officers
Chair, Joseph Buchanan, Washington
Vice-chair, James Driscoll, Arizona

Subcommittees
American White Pelican
Banding
Double-crested Cormorant
Eagles

Representatives to the Pacific Flyway Council and Technical Committees

U.S. Fish and Wildlife Service
Todd Sanders, DMBM, Vancouver
Steve Olson, DMBM, Vancouver
Guthrie Zimmerman, DMBM, Sacramento
Michael Green, Region 1, Portland
Joe Sands, Region 1, Portland
Dan Collins, Region 2, Albuquerque
David Olson, Region 6, Denver
Richard Lanctot, Region 7, Anchorage
David Safine, Region 7, Anchorage
Thomas Leeman, Region 8, Sacramento

Canadian Wildlife Service
André Breault, British Columbia
Garnet Raven, Alberta

Alberta Environment and Sustainable Resource Development
Jason Caswell, Alberta

Ministry of Forests, Lands, and Natural Resources
Vacant, British Columbia
Alaska Migratory Bird Co-management Council
Patty Brown-Schwalenberg
Recommendations
Recommendation 1 - Allocation of Wyoming Wetlands Society Trumpeter Swans to Approved Release Sites

Recommendation
The Pacific Flyway Council (Council) recommends the following allocation of captive-reared Trumpeter Swan cygnets from the Wyoming Wetlands Society (WWS) facility in 2017 for release at approved restoration sites. This allocation depends on hatching success during spring 2017, which is predicted to be 30 cygnets. Allocation of cygnets in priority order is as follows:

1) Blackfoot River Valley, Montana - 7
2) Summer Lake Wildlife Area, Oregon - 5 (≤20% of available allocation)
3) Middle Madison River, Montana - 5
4) Yellowstone National Park - 6
5) Teton Basin, Idaho - 7

If there are additional birds available for release relative to the allocation above, they will be prioritized to restoration sites within the Greater Yellowstone Ecosystem (i.e., Middle Madison River, Yellowstone National Park, and Teton Basin).

Justification
The above allocation of captive-reared Trumpeter Swan cygnets expected to be available in 2017 from WWS is consistent with the allocation protocol in the Council Management Plan for the Rocky Mountain Population (RMP) of Trumpeter Swans. Cygnet allocation was developed considering input from the RMP Trumpeter Swan Subcommittee, the Greater Yellowstone Trumpeter Swan Working Group (GYTSWG), WWS, and the U.S. Fish and Wildlife Service Pacific Flyway Representative. Each restoration project lead has provided a verbal or written annual status report detailing monitoring efforts and project status to the GYTSWG and RMP Trumpeter Swan Subcommittee. None of the project leads, except for Oregon, have indicated they expect to have swans available for release from sources other than WWS.
Adoption
Pacific Flyway Study Committee
March 2, 2017

[Signature]
Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

[Signature]
Eric Gardner, Chair
Recommendation 2 - Amendment to the 2017 Budget

Recommendation
The Pacific Flyway Council (Council) approves an amendment to the 2017 budget for an additional $2,000 to support travel awards to the 7th meeting of the Western Hemisphere Shorebird Group in Paracas, Peru, November 10 - 14, 2017.

Justification
The Western Hemisphere Shorebird Group (WHSG) was established in 2006 to promote, facilitate and coordinate the conservation, management, education and research activities of researchers, conservationists, educators, site managers and governments within the various migratory flyways of the Western Hemisphere. One method for achieving this objective is to hold biennial meetings. The WHSG will hold its seventh meeting in Paracas, Peru, in November 10-14, 2017.

Meetings held by the WHSG foster information sharing, capacity building, and collaboration among shorebird scientists and conservationists in North, Central, and South America. Thus, meetings include biologists from virtually every country within the four major flyways in the Western Hemisphere and, as such, many partnerships are initiated and fostered during this international opportunity for collaboration.

The Council previously has supported, or the Pacific Flyway Nongame Technical Committee (PFNTC) has participated in, the following WHSG-related actions:

1. The Pacific Flyway Shorebird Survey (Recommendation 20, March 2015), which involves citizen scientists and biologists from the Pacific Flyway from Alaska to Peru.
2. Shorebird-focused projects identified by the Southern Wings Program (Recommendation 10, July 2015).
3. The Pacific Americas Shorebird Conservation Strategy, whose planners incorporated issues identified by the PFNTC during a joint regional workshop in 2016.

Funds are being requested by the WHSG from all flyway councils to pay for support for biologists from North and Latin America. Funds would be awarded through a competitive process by the WHSG Travel Awards Committee.
Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

[Signature]
Joseph Buchanan, Chair

Contact: Joseph Buchanan

Pacific Flyway Council
March 7, 2017

[Signature]
Eric Gardner, Chair
Recommendation 3 - Draft Environmental Assessment for Resident Canada Geese

Recommendation
The Pacific Flyway Council (Council) recommends the U.S. Fish and Wildlife Service (Service) eliminate the following underlined text from 50 CFR 21.26 (Special Canada goose permit) in association with proposed amendments in the Draft Environmental Assessment (DEA) on resident Canada goose nest and egg take:

50 CFR 21.26 Special Canada goose permit.

(d) (2) When may a State conduct management and control activities? States and their employees and agents may conduct management and control activities, including the take of resident Canada geese, under this section between March 11 and August 31. In California, Oregon and Washington, in areas where the threatened Aleutian Canada goose (B. c. leucoperia) has been present during the previous 10 years, lethal control activities are restricted to May 1 through August 31, inclusive.

Justification
The Council recommended in July 2015 (Recommendation 15) that the Service remove the temporal restriction associated with the Resident Canada Goose Nest and Egg Depredation Order (50 CFR 21.50) in Pacific Flyway states consistent with the Atlantic Flyway recommendation in 2013. We have reviewed the draft DEA, and have no comments or concerns.

However, we are requesting that regulations be updated to represent current status to other referenced populations. The Aleutian Canada Goose was listed as an endangered population in 1967, downgraded to threatened status in 1990, and removed from protection under the Endangered Species Act (ESA) in 2001. The estimated number of Aleutian Canada Geese in 2016 was 156,030 (SE = 13,711, 95% CI = 129,157–182,904), up from 790 in 1975. Council's objective is 60,000 geese. There are no current threats identified that may reduce this population back to levels that may need ESA protection again.
Adoption
Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair

Contact: Melanie Weaver
**Recommendation 4 - Funding Request for the Rocky Mountain Population of Trumpeter Swans Fall Survey**

**Recommendation**
The Pacific Flyway Council (Council) recommends the U.S. Fish and Wildlife Service (Service) budget $3,000 to support the fall Rocky Mountain Population (RMP) Trumpeter Swan survey.

**Justification**
Monitoring the status of the U.S. breeding segment of the Rocky Mountain Population (RMP) of trumpeter swans remains a high priority for the Pacific Flyway Council (Council), as identified in the Council management plan for this population. A fall aerial survey is used to monitor abundance of RMP swans breeding in the U.S., and has been cooperatively conducted annually by the States of Montana, Wyoming, and Idaho, the National Park Service, and U.S. Fish and Wildlife Service. However, due to decreasing budgets at the state, regional and national scale, it has become increasingly difficult to fund this survey, particularly considering that support from the U.S. Fish and Wildlife Service’s Migratory Bird Programs in regions 1 and 6 have been terminated.

Current costs to operate this survey are $8,720 annually, and this cost is incurred after this survey has been combined with other Federal surveys conducted in the area. Council requests $3,000 be provided annually by the U.S. Fish and Wildlife Service to support this jointly funded cooperative survey. These funds would be distributed as necessary to meet outstanding needs each year, and are necessary to support flight time at Red Rock Lakes National Wildlife Refuge and surrounding areas in Montana.

Current costs to operate this survey are $8,720. The breakdown by state and the National Park Service is as follows:

<table>
<thead>
<tr>
<th>Area</th>
<th>Time</th>
<th>Cost/Hour</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Idaho</td>
<td>7 hours</td>
<td>$550/hour</td>
<td>$3,850</td>
</tr>
<tr>
<td>Wyoming</td>
<td>9.3 hours</td>
<td>$225/hour</td>
<td>$2,070</td>
</tr>
<tr>
<td>Montana</td>
<td>4.5 hours</td>
<td>$265–360/hour</td>
<td>$1,800</td>
</tr>
<tr>
<td>Yellowstone National Park</td>
<td>4 hours</td>
<td>$250/hour</td>
<td>$1,000</td>
</tr>
</tbody>
</table>
Adoption
Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
Recommendation 5 - Harvest Management Working Group Priorities

**Recommendation**
The Pacific Flyway Council (Council) endorses the 2018 priority rankings and project leads for technical work proposed at the 2016 Harvest Management Working Group (HMWG) meeting.

**Justification**
Council supports completing existing priorities before recommending new priorities. For the Pacific Flyway, this includes revisions to the Western Mallard Model and Northern Pintail Model.

**2018 Harvest Management Working Group Priorities**
Priority rankings and project leads identified for the technical work proposed at the 2016 HMWG meeting.

**Highest Priorities (Urgent and Important)**
- Adaptive Harvest Management (AHM) Revisions (aka, double-looping)
  - Multi-stock management (Atlantic Flyway, Population Habitat Assessment Branch [PHAB], HMWG)
  - Mid-continent mallard (Mississippi and Central Flyways, PHAB)
  - Western mallard (Pacific Flyway, PHAB)
- Re-invigorate institutional support for AHM (PHAB, and HMWG Communications Team)

**Long-range Priorities (Non-urgent, but Very Important)**
- Time dependent optimal solutions to address system change (Scott Boomer, Fred Johnson, Mike Runge)
  - Habitat change
  - Hunter dynamics
  - Climate change
- Northern Pintail AHM Revision (Double-looping) (Pacific Flyway, PHAB)
- Consideration of NAWMP objectives for waterfowl management (Human Dimensions Working Group, Flyway Councils, FWS, NAWMP Interim Integration Committee, Joint Technical Committee)

**Additional Priorities**
- Waterfowl harvest potential assessment methods case study development (PHAB, Tech Sections)
- Canvasback harvest strategy development (PHAB, Tech Sections)
• Waterfowl Breeding Population and Habitat Survey Review (Migratory Bird Surveys Branch, HMWG)

Adopted
Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
Recommendation 6 - Letter to Bruce Peterjohn, Bird Banding Laboratory

Recommendation
The Pacific Flyway Council (Council) recommends sending the attached letter to Bruce Peterjohn, Bird Banding Laboratory (BBL) Chief recommending that the BBL:

- Continue the current band reporting call center through the end of the current contract (June 2018) and beyond if funding exists.
- Issue bands for game bird banding inscribed with only the www.reportband.gov address beginning in 2018 if the call center will not be operating after June 2018. In the event that funding is not sufficient to supply only www.reportband.gov bands for all banding starting in 2018, then the BBL should prioritize issuance of size 3a, 3b, and 7a bands with web address only inscriptions used for banding Mourning Doves and Mallards.
- Examine administrative changes that would allow employees of state wildlife agencies to engage in independent bird banding activities without having their own bird banding permit or being listed as a subpermittee on a bird banding permit, so long as the agency holds a valid banding permit.

Justification
The current call center contract expires at the end of June 2018. The BBL must decide by April 2017 whether to exercise their option to continue the current call center contract through June 2018. If the call center contract is to be extended beyond June 2018, the new contract must be advertised by September 2017. The decision to continue the contract (partly) hinges on expected future budgets.

In early 2015, the flyways and the BBL formed a working group to discuss the possibility that, at some point in the future, the contract for the call center handling band reports from the public may become too expensive for the BBL to administer. It was apparent to the group that this would likely happen at some point in the near future and discussions about how to push as many band reports as possible to the web reporting portal ensued. To accomplish this, the work group suggested the BBL remove the 1-800 telephone number from bands issued to game bird banders starting in mid-2018. A clean transition between band types was desired as bands with different inscriptions likely have different reporting rates. These reporting rates are used to calculate harvest probabilities for certain migratory game bird populations which feed directly into models which influence hunting season selection. This clean transition would allow the U.S. Fish and Wildlife Service and flyways to use a single reporting rate in their calculations.

Currently the BBL requires that any person who independently participates in bird banding activities has his/her own bird banding permit or is listed as a subpermittee on a permit issued to another bander. Generally, state wildlife agencies hold only one banding permit for the agency or
per program within the agency. Historically, not all employees independently banding birds were named on those permits. In the last several years, the BBL has emphasized the need to list all banders (working independently) on the federal permit. However, this requirement creates a significant burden for those states where multiple banders assist in banding efforts, especially for game birds such as Mourning Doves. For example, in Oregon, more than 20 agency employees participate in Mourning Dove banding activities in any year and submitting subpermittee applications for each employee to the BBL is a significant administrative burden. Additionally, in many cases annual staff turnover would require submission of additional subpermittee applications for a banding window that is only two months long.

Generally, employees of state wildlife agencies who participate in independent banding activities are professional wildlife biologists. Approval of qualified banders could be accomplished by agency banding coordinators without additional approval by the BBL.

Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

[Signature]
Joseph Buchanan, Chair

Pacific Flyway Study Committee
March 2, 2017

[Signature]
Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

[Signature]
Eric Gardner, Chair

Contact: James Driscoll
Contact: Brandon Reishus
March 7, 2017

Bruce Peterjohn  
Chief, Bird Banding Laboratory  
USGS Patuxent Wildlife Research Center  
12100 Beech Forest Rd.  
Laurel, MD 20708

Dear Mr. Peterjohn,

The Pacific Flyway Council (Council) would like to comment on three Bird Banding Lab (BBL) issues discussed during the March 2017 Pacific Flyway meeting.

The Council understands that: 1) the contract for operation of the band report call center is slated to end in June 2018, 2) the decision to keep this contract through June 2018 must be made by April 2017, and 3) should a new contract be sought to cover the period after June 2018, requests for proposals must be advertised by September 2017. The Council understands that the call center contract is expensive, and the quality of data provided is not as good as data provided by the web reporting portal where approximately 60% of band reports are currently reported. In light of these factors, the Council recommends that if sufficient funding is not available, the BBL should not seek a new call center contract. Instead, efforts should be invested to promote the use of the web reporting portal by the public.

To encourage use of the web reporting portal, Council recommends that the BBL issue bands without the 1-800 telephone number after June 2018. This is most important for game bird bandings and especially those species/populations where known band reporting rates are vital to harvest management (i.e., Mallards and Mourning Doves). Council understands that over 1,000,000 unused gamebird-sized bands bearing the 1-800 telephone number are either in the BBL’s possession, or that of state and other flyway partners, and that replacement of these bands may not be feasible. In the event it is not possible to replace all currently unused bands, Council recommends that, at a minimum, all bands intended for Mallards (size 7a) and Mourning Doves (size 3a and 3b) be replaced prior to preseason (July) banding activities in 2018.

Council understands the BBL currently requires any person independently conducting banding activities must have their own banding permit, or be designated a subpermittee on a banding permit. Most state wildlife agencies only have one bird banding permit, or at most, one per program (waterfowl, migratory upland game bird, non-game, etc.). Maintaining subpermittee changes due to personnel turnovers creates significant administrative hurdles for the states and the BBL, especially in those states where many employees are assisting in meeting state banding
quotas. For example, in Oregon, more than 20 state employees may independently conduct banding activities to help achieve Oregon’s banding quota for Mourning Doves. The Council feels that state employees who are banding can be properly vetted by state program coordinators (usually the employee named as the master bander on the banding permit). The Council therefore recommends that the BBL works with the Council to determine if there are administrative changes that could be made that would remove the requirement that every state wildlife agency employee independently engaging in banding activities be an approved subpermittee on the agency’s federal bird banding permit.

We appreciate the difficulties in managing BBL programs, especially in light of declining budgets, and look forward to our continued cooperation in working together to address these important issues.

Sincerely,

[Signature]

Eric Gardner, Chair
Pacific Flyway Council
Recommendation 7 - Letter to Leonard Jordan Regarding Natural Resources Conservation Service Wetland Determination Methods in the Prairie Pothole Region

Recommendation
The Pacific Flyway Council (Council) recommends sending the attached letter to Leonard Jordan, Acting Chief of the Natural Resources Conservation Service (NRCS), regarding wetland determination methods.

Justification
Pacific Flyway states have concerns with how the NRCS is using outdated and inappropriate wetland determinations for landowners seeking wetland maps for agriculture program compliance in the Prairie Pothole Region. The compliance program is intended to prevent wetland conversion. Approximately 50% of breeding waterfowl in North America nest in that region and the results of converting a large portion of wetlands to agriculture would have significant detrimental effects on waterfowl breeding populations.

Adoption
Pacific Flyway Study Committee
March 2, 2017

Contact: Blair Stringham and Jeff Knetter

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
March 7, 2017

Leonard Jordan  
Acting Chief of NRCS  
USDA, NRCS, Office of the Chief  
1400 Independence Ave., SW, Room 5105-A  
Washington, DC 20250

Dear Acting Chief Jordan:

The Pacific Flyway Council (Council) is concerned by the results of the January 2017 Office of Inspector General (OIG) audit report of the Wetland Conservation Provisions in the Prairie Pothole Region (PPR) and the Natural Resources Conservation Service (NRCS) decision to certify wetland determination based upon maps made between 1990 and July 3, 1996 (pre-1996). The PPR is an extremely productive area for migratory birds and has been shown to attract over 50% of breeding waterfowl in North America, as well as a myriad of other wetland dependent species. The high density of wetlands of the PPR is the main reason it is so productive. Recent landscape analyses conducted by the U.S. Fish and Wildlife Service Habitat and Population and Evaluation Team (HAPET) indicates that nearly two million small, unprotected, shallow wetlands are embedded in cropland within the U.S. PPR, and provide breeding capacity for over three million ducks. Swampbuster has been a valuable disincentive for draining cropped wetlands; however, the recent OIG report uncovered some alarming steps that NRCS has taken to weaken the enforcement of Swampbuster provisions.

Council recommends the NRCS discontinue using the pre-1996 wetland maps to certify wetland determinations and use best available delineations moving forward. The OIG report identified numerous reasons why pre-1996 wetland maps are not of sufficient quality to make a determination of ineligibility for program benefits. They include the following:

1. NRCS had previously regarded pre-1996 determinations for almost 20 years prior to 2012 to be of insufficient quality to certify wetlands.
2. In 1997, the Chief of NRCS declared that 60% of pre-1996 determinations were inaccurate.
3. Internal NRCS studies reported that pre-1996 determinations didn’t meet NRCS standards and were not to be certified.
4. Farm Service Agency officials regarded pre-1996 determination to be of poor quality and not certifiable.
5. In 2012, NRCS requested the National Appeals Division (NAD) Director to reverse a hearing officer’s decision to certify a pre-1996 determination on the basis that NRCS had
never certified a pre-1996 determination. The NAD Director then vacated the earlier decision and reaffirmed that pre-1996 determinations were unacceptable.

6. 75% (341.8 out of 456.9 acres) of the wetlands in 13 tracts that OIG reviewed are no longer protected and subject to being drained because NRCS replaced a post-1996 certified wetland determination with a pre-1996 determination.

Council recognizes these changes were adopted in an attempt to reduce a backlog of drainage requests across the PPR. However, attempting to quickly reduce workloads is not an acceptable justification for the use of unsound methods that were previously discredited and have led to increased drainage of prairie wetlands. These practices run contrary to the intent of Swampbuster. The NRCS is a crucial partner in wetland conservation across the PPR and has perhaps the most direct impact of any Federal Agency on America’s Prairie Pothole wetland resources. Council looks forward to future engagement with NRCS on this important issue.

Sincerely,

[Signature]

Eric Gardner, Chair
Pacific Flyway Council

cc:
Atlantic Flyway Council
Mississippi Flyway Council
Central Flyway Council
Recommendaion 8 - Letter to U.S. Fish and Wildlife Service Regarding Inclusion of the Pacific States in the Depredation Order for Take of Double-crested Cormorants

Recommendation
The Pacific Flyway Council (Council) approves sending the attached letter to the U.S. Fish and Wildlife Service (USFWS) regarding inclusion of the Pacific Flyway states in the depredation order for take of Double-crested Cormorants (cormorants).

NOTE: The letter that accompanied this recommendation contained perspectives previously shared in Pacific Flyway Council letters to the U.S. Fish and Wildlife Service (2012 and 2014). Consequently, the letter and Recommendation 8 have been removed from the packet.
Recommendation 9 - Letter to the U.S. Fish and Wildlife Service Regarding Permitting Requirements

Recommendation
The Pacific Flyway Council (Council) recommends sending the attached letter to the U.S. Fish and Wildlife Service (Service) permit program (with copies to Regions within the Pacific Flyway) regarding permitting requirements for states participating in the Pacific Flyway Rocky Mountain Population Trumpeter Swan restoration program.

Justification
The Pacific Flyway management plan for the Rocky Mountain Population of Trumpeter Swans identifies suitable areas where captively-reared swans can be released in an effort to expand distribution. In the last two years, states participating in this program have received varying guidance regarding federal permitting requirements to receive and release captively-reared swans for this program. For example, Oregon was informed by the Service Region 1 Migratory Bird Permits Office that a federal Waterfowl Sale and Disposal Permit (propagation permit) was required to receive and release Trumpeter Swans in the state. Other states from different regions participating in the program have not been required to obtain this permit. Council would like the Service Headquarters Migratory Bird Permitting Office to provide clarity to all states, and all regional offices, as to which type of federal permit is required, if any, to receive and release captively-reared migratory birds for Pacific Flyway restoration programs.

Adoption
Pacific Flyway Study Committee
March 2, 2017

Contact: Brandon Reishus

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
March 7, 2017

Eric Kershner, Branch Chief
U.S. Fish and Wildlife Service
Division of Migratory Bird Management
5275 Leesburg Pike, MS: MB
Falls Church, VA 22041-3803

Dear Eric Kershner,

The Pacific Flyway Council (Council) requests that your office provide guidance to state agency partners on what type of migratory bird permit states are required to possess, if any, to receive and release captively-reared migratory birds for Pacific Flyway approved restoration programs.

States in the Pacific Flyway have partnered with the U.S. Fish and Wildlife Service (Service) to restore Rocky Mountain Population (RMP) Trumpeter Swans across their historical range since at least the 1990s. These efforts have included moving wild Trumpeter Swans into historically occupied habitat and releasing captive reared Trumpeter Swans. Recently, the state of Oregon was informed by their regional Service permit office that they needed to have a Waterfowl Sale and Disposal Permit (WSDP) to both receive and release for restoration purposes from propagators or other sources. Oregon applied for and received a WSDP in 2016. However, other states, in other regions, conducting the same activity have not received this guidance. Council also questions whether a WSDP is required by regulation to release captively-reared, non-threatened or endangered, migratory birds for any purpose. Although the permit title contains the word “disposal,” Council interprets the Code of Federal Regulations in this sense to mean “dispose of to another person,” such as through a barter or gift, and not release. In fact, Council is not aware of regulations associated with this permit that include the term “release.”

Council is requesting that your office undertake a review of the requirements to release captively-reared migratory birds for restoration purposes and provide consistent guidance to state agencies on what permit, if any, is required to release captively-reared migratory birds.

We appreciate your consideration of this request and look forward to working together to address this issue.
Sincerely,

[Signature]

Eric Gardner, Chair
Pacific Flyway Council

cc:
Chief, U.S. Fish and Wildlife Service, Division of Migratory Bird Management
Permit Office, U.S. Fish and Wildlife Service, Region 1
Permit Office, U.S. Fish and Wildlife Service, Region 2
Permit Office, U.S. Fish and Wildlife Service, Region 6
Permit Office, U.S. Fish and Wildlife Service, Region 8
Pacific Flyway Representative, U.S. Fish and Wildlife Service
Recommendation 10 - Letters of Appreciation to Mike Green and Andrea Hanson

Recommendation
The Pacific Flyway Council (Council) approves sending the attached letters to Mike Green and Andrea Hanson in appreciation for their years of service to the Pacific Flyway Nongame Technical Committee.

Justification
See the attached letters.

Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

Joseph Buchanan, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
March 7, 2017

Dr. Michael Green
Deputy Chief, Migratory Birds & Habitat Program
U.S. Fish and Wildlife Service
Pacific Region
911 NE 11th Avenue
Portland, Oregon 97232-4181

Dear Mike:

On behalf of the Pacific Flyway Council and the Nongame Technical Committee (NTC), I would like to take this opportunity to recognize your contributions to the conservation and management of migratory birds in the Pacific Flyway.

Mike, when you began your work with the NTC in the spring of 2013, you faced the challenge of not being Tara Zimmerman, your effective and well-liked predecessor. But soon, the NTC found your insight and experience in building partnerships invaluable as they grew to meet Council’s vision of a proactive NTC with the scope and capacity to meet emerging needs. As a result of your support and positive engagement, the NTC has built the breadth of experience and depth of trust needed to address difficult issues across diverse landscapes.

Your pragmatic appreciation for process, harnessed to a conviction in the value of collaboration, has directly increased the NTC’s efficiency and efficacy. The NTC’s organization has matured with your active encouragement, responding positively to national reviews, formalizing *ad hoc* work groups into subcommittees, developing process to handle policy, creating funding proposals, and directly engaging with bird conservation partners. Council requested and received additional U.S. Fish and Wildlife Service (USFWS) engagement from several USFWS Regions thanks to your involvement. Clear organizational process has led to improved planning, stronger partnerships, clarified goals and objectives, and numerous accomplishments.

We are grateful for your direct contributions: assisting in the creation and improvement of the nearly 90 Recommendations, Letters, and Information Notes provided to Council during your tenure. These cover a wide range of issues, including implementing some of the most complex and controversial management framework issues addressed by the NTC:

- Implementation of the Double-crested Cormorant management framework and monitoring strategy.
- Implementation of the American White Pelican management framework and monitoring strategy.
- Incidental take permits for eagles.
- Engagement with the Avian Knowledge Network.
- Identification of data-sharing needs.
- Development of an Association of Fish and Wildlife Agencies National Conservation Need to improve renewable energy siting.
- Creation and submission of two Competitive SWG proposals.
- Convening of a bird conservation meeting involving partners from across the Pacific Flyway.

The NTC has benefitted greatly from your unflappable good humor and personable, professional style that recognizes there is equal value in creating good working relationships as there is in working hard together. You have modeled these crucial communication skills for us with honesty and humility as a colleague and friend: speaking from knowledge, listening with respect, and maintaining a willingness to alter course.

We greatly appreciate your contributions to conservation and management of migratory birds within the Pacific Flyway. Thank you for your public service to the Pacific Flyway Council, and we wish you the very best in the future.

Sincerely,

[Signature]

Eric Gardner, Chair
Pacific Flyway Council
March 7, 2017

Andrea Hanson
Conservation Strategy Coordinator
Oregon Department of Fish and Wildlife
4034 Fairview Industrial Drive SE
Salem, OR  97302

On behalf of the Pacific Flyway Council and the Pacific Flyway Nongame Technical Committee, I would like to take this opportunity to recognize your contributions to the conservation and management of migratory birds in the Pacific Flyway.

Through the last seven years on the Pacific Flyway Nongame Technical Committee, you have played a vital role in the activities, work products, and future planning. You have become one of the most influential and longest-standing members, playing a critical role in creating important Pacific Flyway Council products that furthered the management and conservation of nongame species. At a pivotal time for all flyway nongame technical committees, you were involved in review of the effectiveness and productivity of these committees, and ultimately helped redefine the roles and establish the Pacific Flyway Nongame Technical Committee as a leader amongst the flyways. In addition, you were instrumental in numerous work products forwarded to Pacific Flyway Council in the form of recommendations and information notes, including a number of particularly noteworthy items as follows:

- Development of documents that provide a framework for monitoring and managing Double-crested Cormorant and American White Pelican depredating sensitive fish resources.
- Initiation of the Pacific Flyway Habitat Committee, including the development of a charter for the group.
- Revisions to the Pacific Flyway Nongame Technical Committee bylaws.
- Comments on Draft Eagle Conservation Plan Guidance and Draft Land-Based Wind Energy Guidelines.
- Implementation of the Pacific Flyway Nongame Technical Committee internal review, future vision planning, and work plan development.
- Planning for and hosting of a Western Bird Conservation Partners meeting.
- Development of a state data sharing assessment questionnaire.
- Development of two Competitive State Wildlife Grant proposals for Short-eared Owl surveys across the flyway.
- Comments on multiple federal regulations, including raptor propagation, definition of “hybrid”, falconry abatement and rehabilitation, subsistence hunting, revisions to the Bald
• Incidental take permits for eagles.
• Engagement with the Avian Knowledge Network.
• Identification of data-sharing needs.
• Development of an Association of Fish and Wildlife Agencies National Conservation Need to improve renewable energy siting.
• Creation and submission of two Competitive SWG proposals.
• Convening of a bird conservation meeting involving partners from across the Pacific Flyway.

The NTC has benefitted greatly from your unflappable good humor and personable, professional style that recognizes there is equal value in creating good working relationships as there is in working hard together. You have modeled these crucial communication skills for us with honesty and humility as a colleague and friend: speaking from knowledge, listening with respect, and maintaining a willingness to alter course.

We greatly appreciate your contributions to conservation and management of migratory birds within the Pacific Flyway. Thank you for your public service to the Pacific Flyway Council, and we wish you the very best in the future.

Sincerely,

[Signature]

Eric Gardner, Chair
Pacific Flyway Council
Recommendation 11 - Study Committee Representation Assignments

Recommendation
The Pacific Flyway Council (Council) approves the following changes to Study Committee representation to the Arctic Goose Joint Venture technical committee.
- Arctic Goose Joint Venture —Jeff Knetter (Idaho) will replace Dan Rosenberg (Alaska).

Justification
The Study Committee has assigned Study Committee representation based on interest and expertise. Rotation of these duties is necessary to balance workload among members and satisfy requests for Pacific Flyway representation. The above assignment for Pacific Flyway representation is necessary due to personnel changes. Travel expenses for representation to the Arctic Goose Joint Venture are covered by Council funds.

Adoption
Pacific Flyway Study Committee
March 2, 2017

Contact: Jeff Knetter

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair
**Recommendation 12 - Western Mallard Adaptive Harvest Management Model Revisions**

**Recommendation**
The Pacific Flyway Council (Council) recommends the U.S. Fish and Wildlife Service update the Western Mallard Adaptive Harvest Management strategy to incorporate Mallard banding data from Idaho, beginning with the 2017 regulatory process to inform 2018-19 hunting season regulations.

**Justification**
Western Mallard Adaptive Harvest Management (AHM) is based on breeding population and banding data from two stocks of Mallards in western North America: Alaska (the Alaska stock), and British Columbia, California, Oregon, and Washington (the southern stock). Idaho has been consistently banding Mallards during the pre-hunting season period; however, these banding data have not been included in the southern stock of Western Mallard AHM. Idaho and the U.S. Fish and Wildlife Service (Service) assessed the effect of including Idaho banding data on the current Western Mallard AHM framework. The primary assumption of including Idaho bands with Western Mallard AHM is that the population dynamics and harvest rates in Idaho are similar to the dynamics in the rest of the southern stock. Violation of this assumption could bias estimates of overall harvest rates and population parameter estimates (maximum intrinsic growth rate \(r_{max}\), carrying capacity [K], and the scaling parameter [d] for harvest rate). Although we could not directly assess breeding population dynamics of Idaho Mallards, the specific objectives of the assessment were to explore how including banding data from Idaho in the southern stock could potentially influence (1) annual harvest rate estimates, (2) expected regulation-specific harvest rate distributions, (3) estimates of \(r_{max}\), K, and d, and (4) the Western Mallard AHM policy.

Annual harvest rate estimates were slightly higher when Idaho banding data were included in the southern stock. However, these differences were not significant given that the 95% credible intervals overlapped each year (Figure 1), which also resulted in almost no change in estimates of \(r_{max}\), K, and d (Figure 2). Similarly, expected harvest rate distributions were almost identical when Idaho bands were included (Figure 3). Given the similar expected harvest rate distributions and estimated demographic rates, we observed only minor differences in the overall policy (Figure 4). A few cells (4) became more conservative, which was expected given the slight increase in harvest rates, but changes in policy were very minor.

Inclusion of Idaho bands in Western Mallard AHM had only a minimal influence on the framework. However, including Idaho bands in Western Mallard AHM improves spatial coverage of at least some of the Western Mallard monitoring data and helps justify the Idaho banding program, which will provide valuable monitoring data on harvest rates and survival, which could be valuable in future updates to the Western Mallard AHM process.
Adoption
Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Pacific Flyway Council
March 7, 2017

Eric Gardner, Chair

Contact: Jeff Knetter
Figure 1. Estimated harvest rates with and without Idaho banding data in the southern stock for Western Mallard adaptive harvest management.

Figure 2. Estimated population parameters with and without Idaho banding data in Western Mallard Adaptive Harvest Management.
Figure 3. Expected harvest rate distributions with and without Idaho banding data.
Figure 4. Western Mallard Adaptive Harvest Management policies with and without Idaho banding data.
Informational Notes
Informational Note 1 - Banding Subcommittee Creation

The Pacific Flyway Study Committee (SC) approved creation of a Banding Subcommittee to address issues related to mallard banding for the Western Mallard Model, Northern Pintail banding for future harvest strategy modifications and other banding needs as they arise.

This addition requires adding a line item to the Pacific Flyway rotation schedule to identify the Banding Subcommittee Chair. The modified schedule is attached.

Adoption
Pacific Flyway Study Committee
March 2, 2017
Contact: Melanie Weaver

Kyle Spragens, Chair
### Pacific Flyway Rotation Schedule

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pacific Coast</strong></td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
<td>( \text{CA} )</td>
</tr>
<tr>
<td><strong>Rocky Mountains</strong></td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
<td>( \text{CO} )</td>
</tr>
<tr>
<td><strong>Pacific Northwest</strong></td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
<td>( \text{WA} )</td>
</tr>
</tbody>
</table>

### Key Details
- **Inland Waters**:
  - **Upper Mississippi**: May 15
  - **Lower Mississippi**: May 22
- **Other**:
  - **American White Pelican**: July 27
  - **Double-crested Cormorant**: October 7
  - **Eagle**: November 13
  - **Banding**: November 17

### Notes
- **Subcommittee of the Study Committee**
- **Study Committee**
- **Study Group**

---

*Updated Pacific Flyway rotation schedule to identify the Banding Subcommittee Chair.*
Informational Note 2 - Canadian Wildlife Service Briefing to the Pacific Flyway Study Committee

The July 2016 report entitled *Migratory Bird Regulations in Canada July 2016* (distributed electronically to Pacific Flyway Study Committee [PFSC] members) identifies the Migratory Bird Hunting Regulations in effect for the 2016-2017 and 2017-2018 seasons. This is the second year of the Canadian 2-year regulatory cycle and no regulatory changes are proposed for the 2017-2018 season.

The overhaul of the Canadian Federal Hunting Regulations continues. The Canadian Wildlife Service (CWS) completed a review of the regulatory wording associated with hunting permit, possession, abandonment and wastage, legal ownership, non-toxic shot approval process, donation of harvested birds etc. Proposed changes were subsequently provided to the Department of Justice in spring 2016. Target implementation date for the revised regulations remains fall 2018.

CWS initiated a review of the baiting provisions contained in the Migratory Bird Regulations. Baiting can concentrate a large number of birds in a small area and, consequently, it has the potential to result in excessive harvest by hunters and/or lead to unequal access to migratory birds among hunters. CWS is proposing two changes to the baiting regulations:

1. Discontinue the issuance of bait authorizations for the purpose of attracting migratory birds for hunting (bait authorizations allow baiting within 14 days of and during the open season); and
2. Prohibit the deliberate modification of an agricultural crop that is not part of normal recognized agricultural practices for the purpose of attracting migratory birds for hunting (for example, intentionally flooding a standing cornfield).

Pacific Flyway Study Committee members were invited to forward their comments on the baiting proposals to Andre Breault.

Adoption
Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Contact: Andre Breault
Informational Note 3 - Data Sharing

The Pacific Flyway Nongame Technical Committee (PFNTC) hosted a meeting with bird conservation partners in December 2014. Specific objectives of the meeting were to help PFNTC further define its roles and responsibilities relative to other organizations, as well as establish priorities for future action. One outcome was the identified need for better data sharing among states in the Pacific Flyway and partners.

Given the complexities of data acquisition, storage, and sharing, there are law, agreements, and other challenges and opportunities that are unique to each state, and within partner organizations, that need to be considered. To assess these potential complexities and ultimately identify potential paths to data sharing, the PFNTC developed a questionnaire (Appendix 1) delivered to individuals most responsible for managing corporate databases in each member agency of the Pacific Flyway.

Summary of Findings

Perspectives and challenges associated with data sharing varied among the states. All states agreed that data sharing (some states refer to this as data release) is an important and desirable way to interact with partners and the general public. Although some states have no restrictions on the release of data, many states face limitations regarding certain types of data, specifically relating to issues of data ownership (e.g., data from private lands cannot be shared) or sensitive data (e.g., for certain sensitive species, the scale of data products is generalized to mask specific locations).

Next Steps

1. Because of the significant limitations faced by some states in terms of policy or regulatory constraints and staff capacity, implementing a comprehensive data sharing strategy across Pacific Flyway states is not currently practical. However, current or potential, project-specific data sharing opportunities include: 1) storage and analysis of monitoring data for Double-crested Cormorant and American White Pelican, 2) data storage and analysis associated with the proposed C-SWG project on Short-eared Owls involving several states, and 3) the emerging availability of a Bird Banding Lab database for telemetry data. The PFNTC will explore opportunities for project-specific datasets that may serve as data sharing pilot projects.

2. Grants from the federal government now typically require that data be archived. We recognize that there will be a growing interest, if not requirement, to share data collected using federal funds. Avian Knowledge Network (AKN) may serve that role in the future, as encouraged by Association of Fish and Wildlife Agencies’ Partners in Flight/Shorebird/Waterbird Working Group.
3. Data collected by consultants for project proponents are typically not shared when a state permit is not required. State regulations may need to be amended in order for this to occur.

4. Most states have the ability to obtain data from consultants if the issuance of a state permit is involved, but a database platform is needed in many states.

5. The PFNTC will communicate back to our partners and share our findings. This should further the discussion about opportunities to share and perhaps illuminate means to address certain challenges identified by states.

6. The PFNTC will also continue to participate in, and engage with, the AKN Steering Committee.

Adoption
Pacific Flyway Nongame Technical Committee                                             Contact: Joseph Buchanan
March 2, 2017

[Signature]
Joseph Buchanan, Chair
Appendix 1. List of Questions Submitted to States.

Part I. Questions about interest, need, management, and capacity

1. Regardless of your agency’s current data sharing capacity, please describe your state’s interest in managing data in an environment that would allow data sharing with the following types of organizations (please respond to all that apply):
   a. The general public.
   b. NGOs.
   c. Other state agencies.
   d. Federal agencies.

2. How would a data sharing program [e.g., Avian Knowledge Network, Databasin, ScienceBase (USGS), taxa-level databases that could inform management at flyway scales] benefit wildlife management in your state?

3. Does your agency currently have a computerized database system? Y / N
   If yes, is it integrated (linked) across agency offices?

4. What kind of information do you maintain? Please check all categories that apply in the table below.

<table>
<thead>
<tr>
<th>Types of information you maintain</th>
<th>Species Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T&amp;E</td>
</tr>
<tr>
<td>Location Data</td>
<td></td>
</tr>
<tr>
<td>Breeding</td>
<td></td>
</tr>
<tr>
<td>Foraging</td>
<td></td>
</tr>
<tr>
<td>Roosting</td>
<td></td>
</tr>
<tr>
<td>Migration pathway or corridors</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
</tr>
<tr>
<td>Behavior</td>
<td></td>
</tr>
<tr>
<td>Population counts</td>
<td></td>
</tr>
<tr>
<td>Habitat</td>
<td></td>
</tr>
<tr>
<td>Geospatial</td>
<td></td>
</tr>
<tr>
<td>Threats (e.g., oil, gas, powerlines, roads)</td>
<td></td>
</tr>
<tr>
<td>Actions (e.g., mitigation, restoration)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

5. We are aware that sections or divisions within some agencies might create their own databases for specific projects that are not linked to the corporate database. Does your agency have project-specific or regional databases in addition to your centralized (or integrated or corporate) database? Y / N
   If yes:
   a. Do you have intent to connect those datasets to the corporate database?

6. Does your agency have a data management policy that requires the transfer of project-specific or regional databases into a corporate database?
Part II. Questions about limitations

1. Are there capacity needs to implement a data sharing program, or to create/maintain a corporate-style database (e.g., capacity to conduct database manipulation/format, digitization, manual data entry, QA/QC processes, long-term maintenance, compliance with sharing agreements)?
2. Are there limitations to data sharing within your agency? If so, describe in detail relative to the below categories:
   a. Data release policy or regulation.
   b. Data sharing agreements.
   c. Data ownership.
   d. Protection of sensitive data (e.g., T&E locations, or land ownership information).
   e. Other?
3. Does your state currently have the ability to share data? If so, please describe your agency’s data sharing capacity with the following entities:
   a. The general public?
   b. NGOs?
   c. Other state agencies?
   d. Federal agencies?

Part III. Questions about process (if data were shared)

1. What data sharing approach would be preferred by your state?
   a. Existing approach is sufficient/preferred (as described in answers above)?
   b. Individual states host own data with a (currently existing or created) mechanism to share?
   c. One state agency as host for datasets from multiple states (ranging from species-specific data to more comprehensive datasets)?
   d. An established third-party database warehouse (e.g. Avian Knowledge Network)?
   e. Other?
2. Would it be preferable if databases were designed for a specific scope of information (e.g., Pacific Flyway Council projects, SWG multi-state projects) rather than species-specific or comprehensive datasets? If so, please describe.
3. Are there data management standards practiced by your agency that would need to be used by partners (other agencies or organizations) with which you would share data?
   a. Data collection.
   b. Data entry.
   c. Database structure.
   d. Consistency with field definitions or structure.
   e. Other – list all relative components.

PART IV: Please describe other database needs or concerns that are not captured in the questions above.
Informational Note 4 - Human Dimensions Working Group

Stakeholder Survey Update

In 2015, the Pacific Flyway Council (Council) approved funding to support development and implementation of the Human Dimensions Working Group’s proposed survey, “Assessing the Preferences of Stakeholders and Waterfowl Management Professionals to Inform the Implementation of the North American Waterfowl Management Plan (NAWMP) Action Plan.” The survey is designed to assess preferences of waterfowl hunters, viewers, the general public, and waterfowl professionals concerning waterfowl and wetlands conservation. Survey results will provide quantitative measures of stakeholder preferences, and form the foundation to develop objectives and select management alternatives related to the 3rd NAWMP goal of “Growing numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation.” Specific survey objectives include:

- Assess what waterfowl hunters and other conservationists (i.e., members of organizations supporting migratory bird conservation, including viewers) most desire from their natural resource-based management and social settings to inform NAWMP objectives and select habitat and population management alternatives.
- Establish baseline measures that can be repeated to inform the development of a Public Engagement Strategy and monitor trends in achieving the NAWMP goal of “growing numbers of waterfowl hunters, other conservationists, and citizens who enjoy and actively support waterfowl and wetlands conservation.”
- Assess waterfowl hunter knowledge, preferences, levels of use, and support for waterfowl and wetlands conservation.
- Assess other conservationist knowledge, preferences, levels of use and support for waterfowl and wetlands conservation.
- Assess general public awareness and perceptions regarding the importance of the benefits and values (i.e., ecological goods and services) provided by waterfowl and wetlands conservation.
- Assess general public participation in waterfowl-associated recreation and how much they support waterfowl and wetlands conservation.
- Assess waterfowl professional perspectives on the levels of waterfowl populations and habitats needed to support hunter and viewer use opportunities.

The Hunter survey had a goal of 400 responses for each of the Pacific Flyway’s three strata regions (California, Northwest, Intermountain region). Currently, more than 1,400 total responses have been received with over 400 surveys from each region. In addition, each state in the Pacific Flyway had a goal to receive a response rate of at least 20%. Arizona is the only state currently under that goal, and non-response surveys will be sent out to increase response rates.
The General Public and Viewer surveys have been sent to survey participants, and non-response surveys are now being sent to user groups to increase response rates in states with low response rates. The Professional survey is now being finalized and is expected to be sent out soon.

Data analysis for all surveys is expected to begin in April, with preliminary output available by June. All work for this survey is expected to be completed before the Future of Waterfowl Workshop II in September.

The following table identifies work that has been completed, as well as a proposed timeline and future work items.

<table>
<thead>
<tr>
<th>Work Items</th>
<th>Year 1 (FY15) 10/1/14-9/30/15</th>
<th>Year 2(FY16) 10/1/15-9/30/16</th>
<th>Year 3 (FY17) 10/1/16-9/30/17</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
<td>Q1  Q2  Q3  Q4</td>
</tr>
<tr>
<td>Develop draft measurable objectives associated with fundamental objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focus groups</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design and implement general public survey</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identify sample frame and develop sampling design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Decision-Maker and Stakeholder Choice Experiments &amp; Surveys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test surveys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct professional choice experiment workshops</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct web-based surveys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Translate results into recommendations for population, habitat, and people objectives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjust habitat, population, and people objectives based on survey outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

Joseph Buchanan, Chair

Contact: Joseph Buchanan

Pacific Flyway Study Committee
March 2, 2017

Kyle Spragens, Chair

Contact: Blair Stringham
Informational Note 5 - Pacific Flyway Nongame Technical Committee
Recent Activities and Products, Status of Council Products, and Work
Plan

Summary of Recent Activities and Products since March 2016

- Submitted comment letter to U.S. Fish and Wildlife Service (USFWS) regarding revisions to regulations for eagle incidental take and take of eagle nests (see Work Plan item #6).
- Participated on Eagle Technical Assessment Team, Human Dimensions Workgroup, Habitat Committee, the Avian Knowledge Network Steering Committee, and the Southern Wings Technical Committee (see Work Plan items #25-31).
- Participated in development of a Competitive State Wildlife Grant proposal involving the Short-eared Owl. The proposal was submitted to USFWS February 2017 (see Work Plan items #13 and #21).
- Developed a white paper summarizing impacts of anticoagulant rodenticides to bird species (see Work Plan items #44).
- Identified potential funding mechanisms for Southern Wings projects, including Pacific Flyway Shorebird Survey (see Work Plan items #25).
- Updated Pacific Flyway Nongame Technical Committee (PFNTC) Work Plan (see Work Plan item #38).
- Reviewed and provided input on draft Pacific Americas Shorebird Conservation Strategy.

Status of Council Products

- In July 2016, the Pacific Flyway Council (Council) submitted a comment letter to USFWS regarding incidental take under the Bald and Golden Eagle Protection Act. The USFWS published the final rule in November 2016. Consistent with Council comments the USFWS made the following changes to the final rule:
  - The adoption of a new preservation standard that includes consideration for effects on local area population.
  - A modification of the Eagle Management Units boundaries for Bald Eagles to separate the Pacific Flyway into three separate units reflecting concerns about the varying population status in each (Alaska, North Pacific Flyway, South Pacific Flyway).
  - The implementation of a cumulative effects analysis for the local area populations for both species.
  - The requirement for standardized survey protocols conducted by independent third party individuals who report directly to the USFWS.
- Council sent three letters to the USFWS in September 2016. These letters addressed: 1) analysis of Peregrine Falcon take authorization, 2) concerns with the Federal Falconry Database and request for coordination, and 3) a request to coincide release of notices of proposed actions with technical committee and Council meeting schedules in order to facilitate and improve flyway reviews. In response to the falconry database letter, the USFWS recently communicated that the database is still nonfunctional although the USFWS anticipates a new database will be available in the summer 2017.
A Competitive State Wildlife Grant proposal entitled “Predicting Responses of Short-eared Owl Population Size, Distribution, and Habitat Use in a Changing Climate,” was developed and submitted in February 2017, with the Western Association of Fish and Wildlife Agencies as lead applicant. A similar proposal was submitted in 2016 and was not selected for funding. This new proposal incorporates new components that may improve its ranking score. The project proposes a coordinated eight-state effort to address high priority conservation needs of the Short-eared Owl, an umbrella species for western grasslands and shrublands. The project presents a prioritization of landscapes for conservation by implementing an adaptive management approach to various grazing treatments, and determining Short-eared Owl abundance, distribution, and habitat associations across the West, aligning results with predicted changes in climate. Both the 2016 and 2017 proposals are directly related to the PFNTC’s priority initiative to implement coordinated monitoring for the Short-eared Owl.

Upcoming Activities
See attached PFNTC Work Plan.

Adoption
Pacific Flyway Nongame Technical Committee Contact: Carie Battistone
March 2, 2017

[Signature]
Joseph Buchanan, Chair
### Pacific Flyway Nongame Technical Committee work plan

#### Nongame Technical Committee Work Plan

<table>
<thead>
<tr>
<th>Task</th>
<th>Status</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regulatory Needs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MBTA Incidental Take Input</td>
<td>Potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bald and Golden Eagle Rule Revision Input</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peregrine Falcon Take Allocation</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Regulatory Input</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Data Management</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Sharing Assessment</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data Sharing Strategy Development</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring Plan Development</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flyway Short-eared Owl Survey Development</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western YBCU Survey Development</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Monitoring and Reporting</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCCO, USFWS/USACE Monitoring Coordination</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DCCO Survey Implementation/Reporting</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AWPE Survey Implementation/Reporting</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise AWPE Monitoring Strategy</td>
<td>Potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AWPE Population Viability Analysis</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flyway Short-eared Owl Survey Implementation</td>
<td>Potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western YBCU Survey Implementation</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop raptor mortality reporting guidance (for informing rodenticide issue)</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Representation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southern Wings Technical Committee</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Dimensions Working Group</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International Trumpeter Swan Survey</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eagle Technical Assessment Team</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banding Working Group</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Habitat Committee</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AKN Steering Committee</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coordination</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NCN Process Implementation</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coordination and Communication with AMBCC</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convene Consolation Partners Meeting</td>
<td>Potential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise Work Plan</td>
<td>Annual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review and Refine Priorities</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop NCN for assessment of migratory pathways and stopovers</td>
<td>Complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Submit and advocate for NCN for assessment of migratory pathways and stopovers</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implement wetland connectivity assessment</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop potential actions to reduce exposure (of raptors to rodenticides)</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sandhill Crane management plan revision</td>
<td>In progress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Informational Note 6 - Pacific Flyway Representation on the Avian Knowledge Network Steering Committee

The Avian Knowledge Network (AKN) is a partnership of people, institutions, and government agencies, dedicated to promoting broad access to scientific information to support conservation and management of birds and their habitats. To that end, AKN members have developed schemas to fully describe bird monitoring data; tools to aggregate datasets by describing them through these data schemas; simple and informative views of the data that allow for quick aggregation, visualizations, and analyses; and a framework for the cooperative development of tools to visualize and analyze data. Benefits of engaging with the AKN include: state-based datasets rolled-up geographically, leading to more powerful and meaningful analyses; tools for push-button analyses by agency biologists; securely maintained data over the long-term and independent of the vagaries of agency budgets and personnel; and strengthened engagement and collaboration with bird conservation partners in the West.

The purpose of the AKN Steering Committee is to promote the partnership of the AKN, and provide strategic guidance, governance, and decision making for the AKN. The Steering Committee oversees the growth of the AKN and is responsible for registering new nodes, and defining and setting standards for all AKN nodes. Pacific Flyway participation on the AKN Steering Committee emerged as a recommendation from the Conservation Partners meeting in December 2014.

Joseph Buchanan (Washington) served as the first representative for the Pacific Flyway Council (Council) on the AKN Steering Committee starting in 2015 (Recommendation #12, July 2015). After the Steering Committee underwent reorganization in fall 2016, Colleen Moulton (Idaho) was elected in January 2017 to represent Council and serve a 3-year term.

Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

Joseph Buchanan, Chair
Informational Note 7 - Pacific Flyway Study Committee Management Plan Meeting Summaries

The Study Committee continues revision of six management plans and one harvest strategy. Additionally, the Study Committee will conduct a management plan prioritization process in preparation for the fall 2017 Council meeting.

Revision coordinators provided summaries of the following plan revision meetings:
- Lower Colorado River Valley Greater Sandhill Cranes (U.S. Fish and Wildlife Service, Region 2)
- Pacific Brant (California)
- Pacific Flyway Population of Lesser Sandhill Cranes (U.S. Fish and Wildlife Service, Region 1)
- Rocky Mountain Population of Trumpeter Swans (Montana)
- Western Canada Goose (Oregon)
- Western Tundra Swan (Utah)
- Aleutian Canada Goose Management Plan Harvest Strategy (Oregon)

Lower Colorado River Valley Sandhill Crane Management Plan

The Management Plan (Plan) for the Lower Colorado River Valley Population (LCRVP) of Greater Sandhill Cranes is currently under revision. The Plan has not been updated since 1989. The subcommittee includes Study Committee members from interior states (Arizona, Idaho, Nevada, and Utah) as well as representatives from the U.S. Fish and Wildlife Service (Region 2, Division of Migratory Bird Management), Canadian representatives (Canadian Wildlife Service) and a non-agency representative (International Crane Foundation).

Since the March 2016 Study Committee meeting, the plan was revised and reviewed by all subcommittee members. Comments and edits were then compiled and addressed at the January 2017 Study Committee work meeting. The Plan is currently undergoing its second review by subcommittee members and will be returned to the revision coordinator (U.S. Fish and Wildlife Service, Region 2) by April 1, 2017. All comments and edits will be addressed and returned to the subcommittee for final review due by June 1, 2017. Formatting will occur during June 2017 in preparation for submission to the Pacific Flyway Council.

The subcommittee continues to discuss the current designation of this population as being separate from the Rocky Mountain Population (RMP), and Central Valley Population (CVP). Recent monitoring and research has demonstrated that the LCRVP, RMP, and CVP intermingle on the breeding grounds and fall staging areas. The subcommittee is considering both the positive and negative outcomes of potentially combining the three western Greater Sandhill Crane populations (LCRVP, RMP, and CVP). At this time, this is purely discussion and would need concurrence from both the Pacific and Central flyways. Therefore, the discussion will be ongoing and deliberate, to make the best informed decision based on past and current biological data available.

Contact: Dan Collins
Pacific Brant Management Plan
The Pacific Brant subcommittee met on March 1 to work towards finalizing the Management Plan for Pacific Brant for the fall 2017 Council meeting. The Plan revision coordinator (California Department of Fish and Wildlife) will continue to incorporate comments and edits from the subcommittee during spring 2017.

Contact: Melanie Weaver

Pacific Coast Population Lesser Sandhill Crane Management Plan
The Management Plan (Plan) for the Pacific Coast Population (PCP) of Sandhill Cranes is currently under revision. The Plan has not been updated since 1983. The subcommittee met to discuss current issues with the Plan revision. The subcommittee includes Study Committee and Nongame Technical Committee members from coastal states (Alaska, California, Oregon, and Washington) as well as representatives from the Service (Regions 1 and 7, Division of Migratory Bird Management), Canadian representatives (British Columbia and Canadian Wildlife Service) and the International Crane Foundation.

Discussion focused on refining the Plan to incorporate Pacific Flyway cranes that breed in south-central and southeastern Alaska and overwinter in Oregon and California. Also discussed were habitat management objectives and research priorities.

The Plan committee lead (Service – Region 1) will continue to incorporate comments and edits from the subcommittee during spring 2017. Progress on the Plan to this point should allow completion by fall 2017.

Contact: Joseph Sands

Rocky Mountain Population Trumpeter Swan Management Plan
The Pacific Flyway Study Committee has been working to revise the 2012 Management Plan (Plan) for Pacific Flyway Rocky Mountain Population (RMP) Trumpeter Swans. Objectives, management issues, strategies, and monitoring for the total population and the U.S. breeding segment have been revised by the RMP Trumpeter Swan Subcommittee and the Greater Yellowstone Trumpeter Swan Working Group. Objectives and strategies related to the Canadian breeding segment have been discussed with Canadian partners.

Council approved an amendment to the 2012 Plan in March 2015 with the inclusion of a new allocation protocol. An amendment to the current Council protocol and best management practices for release or transport of Trumpeter Swans was approved by Council in March 2016.

Upcoming tasks include refining desired objectives by state and management unit, and adding information necessary to manage this population for the next five years. The Plan will be modified to ensure it follows the Pacific Flyway Style Guide. Additional discussions will explore the role of Oregon and Washington in the Plan. The Trumpeter Swan Society has been, and will continue to be consulted before the Plan is finalized. The Study Committee expects to submit the Plan to Council in July 2017.

Contact: Claire Gower
Western Canada Goose Management Plan
The Pacific Flyway Study Committee has begun to revise plans which guide management of Pacific Population Canada Geese and Rocky Mountain Population Canada Geese. The Study Committee has long discussed the validity of two separate populations of western Canada Geese in the Pacific Flyway and decided to move forward with a new plan which combines these two populations into a single “Pacific Flyway Western Canada Goose Population.” Western Canada Geese, like many types of Canada Geese, have greatly increased in population size over the last three decades, and there is no longer an obvious population boundary for large Canada Geese from Alberta south to Arizona, and from California east to the Central Flyway boundary. Additionally, harvest regulations for both of the current populations are very similar, with long, liberal seasons.

The Study Committee is currently in the process of determining a population objective for this potential newly defined population. The objective will be a minimum population threshold, based on average populations in the 1990s. This objective would be determined from aerial surveys conducted in portions of Alberta, British Columbia, California, Montana, Oregon, and Washington. Progress on this plan has not been as fast as planned and the Study Committee expects to submit the plan to Council for adoption in late summer 2018.

Contact: Brandon Reishus

Western Tundra Swan Management Plan Update
The Western Tundra Swan Subcommittee has made significant progress on revising the Management Plan (Plan) for the western population of Tundra Swans. The subcommittee met in January 2017 to discuss a state-space model for population estimates and other issues pertaining to the Plan. We are now incorporating final comments and will have the Plan ready for Council review on July 1, 2017.

Contact: Blair Stringham

Aleutian Canada Goose Management Plan Harvest Strategy Update
The Aleutian Canada Goose Subcommittee met in March 2017 to discuss issues surrounding the Semidi Island segment of the population, which overwinters on the north coast of Oregon. Currently, the harvest strategy in the management plan maintains hunting closures in areas where the Semidi segment is present. This necessitates private land hunting closures where substantial agricultural damage occurs to dairy pastures by several populations of Canada Geese, primarily cackling and Aleutian Canada Geese, most of which are not part of the Semidi Island segment.

Over the course of the spring, the Study Committee will revise the harvest strategy language to allow Goose hunting on private property in areas used by the Semidi Island segment of the Aleutian Canada Goose population. The Study Committee expects to submit the revised harvest strategy to Council for adoption during summer 2017.

Contact: Brandon Reishus
Adoption
Pacific Flyway Study Committee
March 2, 2017

[Signature]
Kyle Spragens, Chair
Informational Note 8 - Rocket Net Propellant

Use of rocket netting for wildlife capture has been a common practice for wildlife professionals since the late 1950s. Rocket net capture of waterfowl is currently one of the most effective means of live-bird capture and serves as an invaluable tool for many marking programs used to generate population estimates and harvest rates (e.g. Aleutian Canada Geese, Mallards).

The U.S. Fish and Wildlife Service (Service) obtained a large quantity of M6 propellant from the Department of Defense in 1995. The propellant was provided to Winn-Star who manufacturers the rocket net charges under an agreement with the Service. The propellant supply is expected to be sufficient through the 2018 season. Investigation of an alternative propellant for rocket netting activities beyond 2018 is needed. Currently, the estimated cost for a 5-year supply of PAP 7993 type propellant is $109,300. This would need to be cost-shared by the flyway states, the Service and other government agencies (e.g., United States Geological Survey and Wildlife Services) that utilize rocket charges.

Adoption
Pacific Flyway Study Committee
March 2, 2017

Contact: Melanie Weaver

Kyle Spragens, Chair
Informational Note 9 - Southern Wings Projects

In July 2015, the Pacific Flyway Council (Council) adopted a process to evaluate, endorse, and collaboratively fund (if Council or states choose to participate) Southern Wings Program (SWP) projects that reflect priorities of the Pacific Flyway states (Recommendation #10). Through that process, the Council liaison will submit to Council up to three projects from the Association of Fish and Wildlife Agencies’ SWP Technical Committee that the Pacific Flyway Nongame Technical Committee (PFNTC) and Study Committee (SC) deem appropriate for support from Pacific Flyway states. The SWP projects described below are pre-existing projects that reflect Council interests. The PFNTC and SC will work with the SWP to develop new projects, if needed, to address Council’s priorities. The PFNTC worked with the Southern Wings Program to develop a brochure describing a funding mechanism states could use to contribute to Southern Wings projects.

POTENTIAL PROJECTS IDENTIFIED FOR THE PACIFIC FLYWAY

Northwest Mexico (Baja California, Baja California Sur, Sonora, Sinaloa, Nayarit)

The Pacific Coast of the Western Hemisphere supports entire populations of neotropical migratory shorebird species during the non-breeding season. A network of coastal and interior wetlands stretching from southern Alaska to Chile host significant aggregations of shorebirds and are critical for their survival, including 12 Western Hemisphere Shorebird Reserve Network sites in Northwestern Mexico. The Pacific Flyway Shorebird Survey and the Migratory Shorebird Project (MSP) work to fill gaps in Pacific Flyway species population status and trends, assess threats, and identify priority sites for conservation. Mexico is particularly important with globally significant populations of shorebird species spending the winter on the Pacific Coast. The primary species recorded during the annual winter survey in Mexico are: Western Sandpiper, Dunlin, Marbled Godwit, Willet, Black-bellied Plover, Sanderling, Greater Yellowlegs, dowitcher spp., Snowy Plover, Black-necked Stilt and American Avocet. The main conservation concerns for shorebirds in the region are human disturbance and habitat loss or degradation. Starting in 2013 and continuing to 2023, the MSP aims to complete annual non-breeding bird surveys at 20 sites across Northwestern Mexico which includes collecting data on the number of birds (shorebirds, waterbirds and waterfowl), and assessment of human disturbance, habitat condition, and raptor presence. Another action is to develop a sampling design to improve monitoring for Snowy Plover, Red Knot, Willet, and Sanderling on sandy beaches and be better able to understand human impacts at beaches. Bird survey data will be combined with habitat maps to identify priority wintering sites for Species of Greatest Conservation Need identified by Pacific Flyway states and work with Terra Peninsular (a conservation non-profit organization) to develop shorebird-friendly management and conservation strategies for important areas. Surveys will also inform communication and outreach activities to local communities to raise environmental awareness about shorebird conservation.
The budget need is approximately $25,000 per year. Funds will help conduct bird surveys across 20 sites, expand monitoring coverage at sandy beaches, identify conservation strategies, and conduct education and outreach campaigns. Individual actions can be supported for $5,000 to $10,000 each. Additional details are available upon request.

Southern Wings Partners: Arizona Game and Fish Department, Centro de Investigacion Cientifica y de Educacion Superior de Ensenada, Grupo Aves del Noreste, Unidad Academica Mazatlan- ICML-UNAM, Terra Peninsular, Point Blue Conservation Science.

**Project 2: Restoration of Migratory Grassland Bird Habitat in the Valles Centrales and Janos Grassland Priority Areas**

Chihuahua, Mexico

Grassland birds are declining more rapidly than any other group of North American birds. The Chihuahuan Desert of northern Mexico is a continentally important wintering area, supporting significant populations of more than 90% of migratory grassland bird species breeding in western North America. Intensive cropland agriculture is rapidly expanding in the Mexican Chihuahuan Desert, threatening to severely reduce the remaining low-slope native grassland habitat needed by nearly 30 high-priority grasslands bird species. Nowhere has the recent agricultural expansion been as rapid as in Valles Centrales of Chihuahua, the largest of the 12 Grassland Priority Conservation Areas (GPCAs) in Mexico. In the Janos GPCA, grassland conversion to agriculture and economic challenges to ranchers amidst the invasion of shrubs and desertification are much the same as in Valles Centrales. To reduce the threat of habitat degradation and conversion, Bird Conservancy of the Rockies (BCR) and partners engage private and communal landowners in range improvement and habitat restoration projects on their lands through development of bird-friendly management plans and technical and financial assistance in implementing rotational grazing systems (including needed infrastructure), protection of sensitive habitat, shrub-removal, erosion control and other restoration techniques. BCR and partners aim to improve at least 28,000 acres of grasslands in these areas over the next three years. The aim is to secure 15-year collaborative agreements with each major partnering landowner to protect conservation investments. Keeping ranchers on the land by helping them improve their management and profitability, while simultaneously improving wildlife habitat, is currently the most immediate and cost-effective way to prevent further loss of grasslands in the region. Species benefited include Chestnut-collared Longspur, Brewer’s Sparrow, Grasshopper Sparrow, Lark Bunting, Clay-colored Sparrow, Baird’s Sparrow, Scale Quail, Sprague’s Pipit, Loggerhead Shrike, Western Meadowlark, Ferruginous Hawk, and Aplomado Falcon.

Contributions of between $5,000-$30,000 will help ranchers defray costs of modernizing their management and support development of integrated management plans, grassland restoration, erosion control and improvements in fencing and water distribution/storage needed for rotating herds.

Southern Wings Partners: Bird Conservancy of the Rockies (formerly Rocky Mountain Bird Observatory), and many in-country partners; Arizona Game and Fish Department and New Mexico Department of Game and Fish have participated.
Project 3. Protecting Stopover and Wintering Habitat for Key Priority Species of Shorebirds and Waterbirds at Laguna Madre, Mexico
Tamaulipas, northern Mexico.

Laguna Madre is formed by a barrier island enclosing a lagoon more than 100 miles long and as much as 15 miles wide, forming many bays, inlets and sand islands. The project goal is to protect breeding, stop-over and over-wintering habitat for priority species of shorebirds, waterbirds, and waterfowl. Species affected include Redhead, Long-billed Curlew, Snowy Plover, and Piping Plover, among others. Conservation actions at Laguna Madre have been identified as a priority in the Rio Grande Joint Venture Implementation Plan. Actions include protecting 5,000 hectares of habitat through conservation easements; restoring 50 hectares of freshwater ponds; reforestation of mangroves to stabilize islands and provide habitat; support for community monitoring and island clean-up programs; fencing of key areas to prevent predators from disturbing bird areas; and surveying the wintering and breeding populations of shorebirds, waterfowl and other birds to monitor success and adapt actions as needed.

The budget need is approximately $80,000. However, individual actions can be supported for $5,000 to $30,000 each. Additional details can be provided upon request.

Southern Wings Partners: Pronatura Noreste and American Bird Conservancy; Texas Parks and Wildlife Department has participated.

Adoption
Pacific Flyway Nongame Technical Committee
March 2, 2017

[Signature]
Joseph Buchanan, Chair

Adoption
Pacific Flyway Study Committee
March 2, 2017

[Signature]
Kyle Spragens, Chair
A Partnership of State Fish and Wildlife Agencies

Southern Wings

- **Offers** an easy, transparent, and flexible process for states to effectively conserve their migratory bird species of greatest conservation need when they are not in the U.S.;
- **Critical** complement to in-state investment on migratory bird stop over and breeding habitats;
- **Leverages** limited state funds;
- **Identifies** strategic, biologically relevant projects with high quality partners that provide the most bang for your conservation buck;
- **Provides** an effective and efficient way to engage in successful conservation partnerships and the Neotropical Migratory Bird Conservation Act (NMBCA), the North American Wetlands Conservation Act (NAWCA) and other funding sources.

Projects

- **Implement** objectives that are biologically relevant to the states;
- **Aim** to take action on high priority objectives in critical habitats for state priority migratory bird species;
- **Protect** your in-state investments through full-life cycle conservation;
- **Work** with partners that have an established and proven track record.

Vision: Healthy and sustainable populations of migratory birds throughout the Western Hemisphere that are enjoyed for generations to come.
Mission: Encourage and facilitate state fish and wildlife agency participation in conservation projects for shared priority birds in Mexico, Central America, South America and the Caribbean
State contributes funds through a Regional Association
A Regional Association (RA) gathers and moves individual state project contributions or combined regional funds through a U.S. NGO (e.g., American Bird Conservancy (ABC), National Audubon Society). The RA and U.S. NGO may charge a reasonable overhead (less than 10%) for handling and facilitating the transfer of monies. The funds are collected, held and disseminated for approved projects. The U.S. NGO is responsible for overseeing project implementation, administering funds, and providing annual accomplishment reports. The Southern Wings coordinator ensures the project(s) are implemented, reports are provided, and helps address any issues that arise. (SEAFWA, MAFWA, and NEAFWA implement this mechanism). A Flyway could follow the model of a Regional Association.

State contributes funds directly to a U.S. based NGO
State adopts an approved project (or establishes a new one) and contributes funds to the project through a U.S. NGO. The U.S. NGO may charge a reasonable overhead (less than 10%). The funds are collected (from one or more states), held and disseminated for the project to the on the ground NGO in the project country. The U.S. NGO is responsible for overseeing project implementation, administering funds, and providing annual accomplishment reports. The Southern Wings coordinator ensures the project(s) are implemented, reports are provided, and helps address any issues that arise. (Multiple states follow this mechanism).

State contributes funds directly to on the ground project partner
State reaches out to on the ground partner in the project country to establish a new project or to participate in an on-going project. State and on the ground partner establish agreement, reporting requirement, and mechanism for funds transfer. State shares project reports with Southern Wings staff to include in official portfolio of Southern Wings projects and to document over-all Southern Wings accomplishments (Arizona follows this option).

State contributes match to a NMBCA, NAWCA or other grant funded project
State contributes eligible match to a partner project funded by a grants program (e.g., NMBCA) implementing work south of the U.S. The state and partners collaborate on project development and document match as required by funding program. Partner (match recipient) is responsible for overseeing project implementation, administering funds, and providing annual accomplishment reports. State or partner shares project reports with Southern Wings coordinator to include in official portfolio of Southern Wings projects and to document over-all Southern Wings accomplishments. (Colorado followed this option).
Informational Note 10 - Support for Western Arctic Population Lesser Snow Goose Banding on Banks Island

In December 2016, the Pacific Flyway Council (Council) sent a letter to Jerome Ford, Assistant Director – Migratory Birds for the U.S. Fish and Wildlife Service (Service) requesting the Service begin the consultation process to revise existing National Environmental Policy Act documents for light goose management to allow for a conservation order within the Pacific Flyway. Council identified growing light goose populations as a significant management concern they would like to address proactively. Council requested the metric used to trigger a conservation order be population-based and tied to the Pacific Flyway management goal. Council also committed to assist partners engaged in collecting accurate information on population size, population trajectory, and harvest estimates of light geese in the Pacific Flyway.

Photographic surveys of Western Arctic Population (WAP) Lesser Snow Goose nesting colonies in the Northwest Territories indicate an increase in the number of nesting geese from ~171,000 adults in 1976 to ~500,000 adults in recent years (Kerbes et al. 1999; Hines et al. 2010; Canadian Wildlife Service - 2013, unpubl. data). However, photographic surveys only account for breeding birds and do not capture the non-breeding segment of the population.

More comprehensive and accurate information on population size and trajectory, and harvest estimates can be obtained through banding. Recovery information based on a long-term banding program allows managers to calculate Lincoln estimates of total population size. The Canadian Wildlife Service (CWS) conducted operational banding of Lesser Snow Geese on Banks Island from 1994-2007, re-initiated their banding efforts in 2015, and are committed to run this banding program for at least the next five years. Continued banding is necessary to obtain accurate population demographic information.

The Banks Island banding program is part of a network of six goose banding stations distributed across the Canadian Arctic. The white goose banding network in the Canadian Arctic addresses banding needs for five species of geese and several subspecies/populations that migrate through and winter in each flyway. The CWS is requesting support for all six banding stations from all four flyways (i.e., annual contributions include Atlantic Flyway - $20,000, Mississippi Flyway - $50,000, Central Flyway - $55,000) and the Service via the Arctic Goose Joint Venture. Requests are commensurate with the number of stations that address priority information needs in each flyway. Banks Island is the primary banding station to target a Lesser Snow Goose population of interest to the Pacific Flyway; Karak Lake targets Ross’s Geese. More specifically, it targets WAP Lesser Snow Geese. Banks Island supports >95% of the WAP Lesser Snow Goose breeding population. The information obtained from the Banks Island banding program will allow the derivation of Lincoln population estimates and an assessment of the impact of Special Conservation measures implemented in Canada in 2015 (i.e., overabundance designation).
Additionally, monitoring and research activities will be conducted at the station to assess the overall impact of WAP Lesser Snow Geese on the system. For example, a habitat study will be initiated in 2017, which will aim to provide baseline habitat information in areas used by Lesser Snow Geese, assess trends in habitat change, and investigate the role of geese in those changes. Obtaining information on breeding ground habitats and their potential degradation will help Council identify and implement future management programs.

As Council beings to consider a budget for 2018, CWS requests Council provide $20,000/year (USD) for five years to support the Banks Island banding program, beginning in 2018. Overall annual expenditures to operate this program are approximately $160,000. These funds would help cover aircraft and fuel costs as well as crew expenses.

References:


Adoption
Pacific Flyway Study Committee
March 2, 2017

[Signature]
Kyle Spragens, Chair
Informational Note 11 - Take Allocation of Peregrine Falcons for Falconry Purposes in the United States West of 100° Longitude

In March 2009, the Pacific Flyway Council approved the Pacific Flyway Nongame Technical Committee (PFNTC) recommendation to follow authorizations of the U.S. Fish and Wildlife Service Final Environmental Assessment and Management Plan on Take of Migrant Peregrine Falcons from the Wild for Use in Falconry, and Reallocation of Nestling/Fledgling Take, allowing the take of up to 116 wild first-year Peregrine Falcons (41 in Alaska, 75 apportioned among states west of 100° west longitude).

In the seven years since approval of this recommendation (excluding Alaska which has a separate authorization under the federal regulations), nine of the eleven Pacific Flyway states have authorized take of an average of 70 (range 56 to 83) peregrines per year; an average of 21 (range 18 to 40) have been removed from the wild per year. Two states (Nevada and California) within the Pacific Flyway, and the Central Flyway states west of the 100° west longitude, currently do not authorize Peregrine Falcon take. Alaska has authorized the take of 41 Peregrine Falcons per year and averages the take of two individuals per year.

Pacific Flyway states (excluding Alaska) have not approached the overall limit of 75 peregrines, in permitting or in actual take, although take in some states was equal to allocation in some years. Thus reallocation of take permits across the 11 states in the Pacific Flyway, and states within the Central Flyway, has not been necessary. The PFNTC, through coordination with the Central Flyway NTC, will develop an allocation process when Peregrine Falcon take begins to approach the authorized limit.

Adoption
Pacific Flyway Nongame Technical Committee
Contact: James Driscoll
March 2, 2017

Joseph Buchanan, Chair
Subcommittee Reports
Population Status. Population status will be discussed at the Fall 2017 meeting.

Harvest Information. No information on harvest was presented.

Management Activities. The subcommittee convened to discuss the desire by the State of Oregon to open the Tillamook County Special Management Area (TCSM) to goose harvest. The TCSM has been closed to harvest since 1982 to protect a segment of the Aleutian Canada Goose population that breed on the Semidi Islands in Alaska and winter exclusively in the TCSM area. This group of birds is thought to be at low population size (~150-300 birds) and show some genetic differentiation from the western population of Aleutian Canada Geese. When the TCSM was closed, the Semidi Island birds were the only birds wintering in the area. Since then, the overwinter population of White-cheeked geese in the TCSM area has increased to ~1500-7000 birds that mix with Semidi Island birds. As a consequence, there is reduced concern over potential high harvest mortality due to swamping by other geese, if harvest were allowed in the TCSM.

The U.S. Fish and Wildlife Service in consultation with Flyway partners, began offering depredation kill permits for the TCSM to address agricultural damage concerns of local farmers. The State of Oregon would like to address depredation issues by offering a hunting opportunity in the TCSM. Brandon Reishus (Oregon) has volunteered to begin revising the Harvest Strategy from the Aleutian Canada Goose Management Plan to change the status of the TCSM closure. The Study Committee expects to submit a revised Harvest Strategy to Council for adoption at the fall regulatory meeting. Details of the Harvest Strategy revision appear in Informational Note 4 – Pacific Flyway Study Committee Management Plan Meeting Summaries.

Research Activities. No information on research activity was presented.

Recommendations. No recommendations were made.
American White Pelican Subcommittee
Russell Norvell, Utah
Colleen Moulton, Idaho

Implementation of the American White Pelican Framework

Background
The Pacific Flyway Council’s (Council) *A Framework for the Management of American White Pelican Depredation on Fish Resources in the Pacific Flyway* (framework; Pacific Flyway Council 2012), identified two population assessment strategies:
1. Identify, develop, and implement monitoring protocols necessary to determine American White Pelican (AWPE) population demographics and distribution at the flyway scale to guide and assess management actions.
2. Develop and implement demographic, genetic, and movement studies aimed at specific gaps in our knowledge of population dynamics and habitat use.

The framework’s first strategy is being implemented through *A Monitoring Strategy for the Western Population of American White Pelicans within the Pacific Flyway* (Pacific Flyway Council 2013). This once-every-three-year monitoring effort was first implemented in 2014, and planning is underway for 2017.

Current and On-going Work
This subcommittee continues to work toward implementation of the framework’s second population assessment goal. Current activities include:

1. Annual wing-tagging of juvenile pelicans at the Gunnison Island colony in Utah, and the Blackfoot and Minidoka colonies in Idaho. This work has led to:
   - Survivorship analysis.
   - Evidence of strong density-dependence in Pacific Flyway populations.
   - Documentation of stopover and wintering areas.
   - The first breeding season observations of birds marked as juveniles.
   - Documentation of strong connectivity for the Pacific Flyway populations.
2. Determine the efficacy of using an Unmanned Aerial System (UAS) to conduct simultaneous UAS and traditional ground counts at Idaho colonies. This approach uses automated image processing software and scripts to potentially improve data accuracy and resolution, while decreasing disturbance and costs.
3. Improving wing-tag re-sight rates using citizen science. Utah is working with non-governmental organizations and academics to recruit, train, and deploy citizen scientists to improve re-sight rates for wing-tagged pelicans around the Great Salt Lake and other important wetlands. This will directly improve the precision of survivorship estimates.
4. Capturing adult AWPEs and deploying 30 more solar-powered GPS satellite transmitters to:
   - Identify breeding, foraging, migration stopover, and wintering habitats.
   - Identify migration pathways.
   - Describe local and regional breeding season movements.
   - Identify management and conservation partners with influence over crucial landscapes.
   - Improve airport airspace security.
5. Refining the live public on-line pelican map (https://wildlife.utah.gov/pelican_webmap/) to include all re-sight and Bird Banding Laboratory records for AWPE to add context for movements, and to include spatial analysis tools for streamed data.

**Planned work**
1. Explore need for amending the monitoring strategy’s survey schedule to account for evidence of strong density-dependence in the western pelican population (Moulton et al. *in review*). This potential change may result in survey implementation in both 2017 and 2018.
2. Improve survivorship analysis using resight data from targeted citizen science surveys in Utah (2017).
4. Seek support for a graduate student opportunity in Utah.
Banding Subcommittee
Brandon Reishus, Oregon

The group has included an informational note to Council informing them of the group’s formation and a recommendation to modify the chair rotation schedule.

Topics of discussion included:

Mallard Banding Responsibilities
Division of Migratory Bird Management staff recently summarized pre-season Mallard banding efforts throughout the Pacific Flyway and it is apparent that few National Wildlife Refuges are currently assisting in reaching these banding objectives for Mallards in the late summer. The Study Committee discussed drafting a letter from Council advocating for increased banding effort at refuges but has decided to defer that action until an updated western mallard banding needs assessment is completed by the U.S. Fish and Wildlife Service. This work is expected to be completed within the next 12 months.

Northern Pintail Banding Objectives
The group discussed the objectives of the current banding effort on Northern Pintail in California during both spring and late summer. The committee felt that the efforts should prove beneficial for future pintail harvest strategy revisions. Other states have shown interest in spring banding, with Washington planning an effort for this spring in the Columbia Basin.

Arctic Goose Banding
Eric Reed (CWS-Yellowknife) reviewed the recent Lesser Snow Goose banding efforts on Banks Island and outlined plans for future banding. Snow Goose banding on Banks Island occurred annually from 1994 – 2007 and the banding program was re-initiated in 2015. Overall, 25,000 Snow Geese have been banded since 1994. Information from current efforts should inform management by helping assess effects of increased hunting opportunity in late winter in Pacific Flyway states and spring harvest in Alberta and the Northwest Territories.

Canadian Wildlife Service (CWS) also intends to begin marking Pacific Brant on Banks Island this coming summer. Brant have not been banded in northwest Arctic Canada since 2001.

As a part of CWS renewed activities on Banks Island, baseline habitat data are being collected with the goal of assessing the contribution of Snow Geese to habitat change on the island.

Total cost for the banding work on Banks Island is approximately $160,000 annually and CWS is committed to run this banding program for at least the next three years. Approximately half of the funding is being provided by CWS with the remainder from partners. CWS is requesting $20,000/year from Council to assist in this work. The Study Committee thinks that this is an important project that would benefit the Pacific Flyway and white goose management and that it should be supported financially by Council. An informational note will be sent to Council informing them of a likely future assessment to help fund the work on Banks Island.

The Committee also discussed the need for an operational goose banding program on the Yukon-Kuskokwim Delta of Alaska. Goose banding has occurred in the area by various partners in the past and most efforts have been focused on individual species, with different goals and rarely
using a coordinated multi-species approach. The Study Committee thinks that a coordinated banding effort, using helicopters to target molting Geese, could be very effective in capturing Geese to help inform management actions related to Emperor Geese, Pacific Brant, Cackling Canada Geese, Pacific Greater White-fronted Geese, and possibly Taverner’s Canada Geese. The committee will continue to explore this possibility. Coastal members will coordinate a conference call this spring with partners such as Yukon Delta NWR, USGS Alaska Science Center, UAF, etc., to assess how to move forward with this project.

**Bird Banding Laboratory Call Center and Band Inscription Type Transition**

During Monday’s joint technical committee session, both technical committees received a briefing from a representative from the Bird Banding Laboratory. The update included a discussion of the impending decision by the BBL to maintain or discontinue the operation of the band reporting call center and the status of deploying a new band inscription type to be used beginning with preseason banding activities in 2018.

Members of the Study Committee have concerns about the BBL’s suggestion that 1-800 inscription bands need to be used in 2018 and beyond for game bird banding. From previous discussions with the BBL, the Pacific Flyway understood that a clean break from bands with the 1-800 inscriptions to bands with a web link inscription would occur in 2018, before the start of preseason banding activities. The clean break was desired so that two different band types, likely with different reporting rates, would not be used during the same year. If it is unavoidable that some 1-800 number bands be used in 2018 and beyond, the Study Committee recommended to the BBL that, at a minimum, only web-address bands be distributed and used for Mallard and Mourning Dove.

**Bird Banding Laboratory – Need for Sub-permittees Under Banding Permits Issued to State Wildlife Agencies**

The BBL highlighted that any person independently banding migratory birds must have his/her own banding permit or be named as a sub-permittee on a permit issued to another individual. States commented that this condition is difficult to meet since in many cases multiple field staff are participating in banding activities for Mourning Doves and waterfowl, and keeping up with personnel changes is both time consuming and difficult. States also had questions about the difference between a station permit and a permit issued to an individual. The states were under the assumption that permits held by state agencies were typically station permits, which should allow agency personnel to engage in banding activities without authorization from the BBL. If individual permits are required for all banders, then there is no significant difference between a station permit and an individual permit. The subcommittee recommended that the Council letter to the BBL also address the requirement for individual banding permits for all banders.

**Recommendation.** There are two recommendations from the subcommittee:

1) Modify chair rotation schedule by adding the Banding Subcommittee. The current chair would be from Oregon.

2) Send a joint recommendation letter, with all members of the NTC, to the USGS Bird Banding Laboratory commenting on the call-center contract, the need to switch band inscription types if the call center contract is ended, and requirements for any state wildlife agency employee to be named on banding permit issued to the state agency prior to independently participating in bird banding activities.
Double-crested Cormorant Subcommittee
Michelle McDowell, U.S. Fish and Wildlife Service
Colleen Moulton, Idaho

The Pacific Flyway Council’s *A Monitoring Strategy for the Western Population of Double-crested Cormorants within the Pacific Flyway* (Pacific Flyway Council 2013; PFC Strategy) identifies 2014, 2017, 2020, and 2023 as monitoring years to implement the strategy. However, the western population of Double-crested Cormorants (cormorants) has been monitored in the intermediate years by the U.S. Army Corps of Engineers (USACE) for their own management purposes summarized below.

**2016 Double-crested Cormorant Monitoring Effort by the U.S. Army Corps of Engineers**

**Background**
As part of the U.S. Army Corps of Engineers’ *Double-crested Cormorant Management Plan to Reduce Predation of Juvenile Salmonids in the Columbia River Estuary* Final Environmental Impact Statement (USACE 2015), the USACE conducted a regional monitoring effort in 2016 to assess the impacts of lethal and nonlethal actions implemented on the East Sand Island colony to the western population of cormorants.

**Survey Goal**
Estimate the size and trend of the western population of cormorants using methods described in the PFC Strategy. Information gained through this monitoring effort will be used to adjust future actions to the East Sand Island colony through an adaptive management strategy.

**Survey Implementation**
The USACE worked through the U.S. Fish and Wildlife Service (USFWS), who then worked with refuges, states, the Province of British Columbia, and contractors, to survey select cormorant colonies, using methods described in the PFC Strategy. The 2016 survey effort was funded in part by the USACE, passed through the USFWS to flyway states, and by individual states.

The Pacific Flyway Nongame Technical Committee (PFNTC) coordinated collection of colony data by state, and submitted data to the USFWS. The USFWS compiled these data to derive a breeding population estimate.

**Survey Data Results**
In 2016, 40 sites were monitored of the 46 selected. Four sites in interior California, one in coastal California and one in Idaho were not monitored (Table 1). An additional 69 sites were surveyed opportunistically for a total of 109 colony sites or colony complexes (i.e., collection of closely associated colonies) monitored and analyzed. In 2015, 45 of the 46 selected sites were monitored (a colony in British Columbia was not monitored). An additional 78 sites were surveyed opportunistically for a total of 123 sites or complexes surveyed. In 2014, 115 sites or complexes were monitored as part of the Pacific Flyway monitoring effort (Pacific Flyway Council 2013).

The 2016 breeding population estimate was 38,153 pairs (95% CI 32,172 - 44,134). The 2015 breeding population estimate was 37,301 pairs (95% CI 33,132 - 41,469). The 2014 estimate
was 36,719 (95% CI 33,562 - 39,875). The population estimate for 2016 is 2.3% above the 2015 estimate (p = 0.82), and is approximately 3.8% above the 2014 estimate (p = 0.68). However, there is no evidence of a statistically significant change in breeding population size.

In 2016, the East Sand Island colony fell below the lower limit for the first stratum of >10,000 nests established for analysis purposes. To remain consistent with the original intent of the PFC Strategy to keep the largest colonies separate in the analysis, the PFNTC (with USFWS consultation) decided to reduce the lower limit of the first stratum to 5,000. This change is reflected in Tables 2 and 3.

Survey Cost
The estimated total cost of the 2016 effort was approximately $102,000. The USACE funded approximately $62,000 of the effort, the USFWS provided approximately $25,000, and states provided approximately $15,000 of direct and in-kind services.

Future Monitoring Plans
2017 Monitoring Plan: Implementation of the PFC Strategy by flyway states was initiated in 2014, with monitoring scheduled for every three years thereafter for at least 10 years (i.e., 2017, 2020, and 2023). Therefore, the USACE is not currently planning to fund the monitoring effort in 2017. Further discussions between the PFNTC, USACE, and the USFWS regarding 2017 funding are under way.

2018 and 2019 Monitoring Plan: The USACE plans to continue funding the cormorant monitoring effort in 2018 and 2019.

Citations

Table 1. 2016 Sites Monitored

<table>
<thead>
<tr>
<th>Colony Complex /Sites Selected (Submitted)</th>
<th>Additional Sites</th>
<th>Total Monitored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>British Columbia</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>California</td>
<td>15 (10)</td>
<td>3</td>
</tr>
<tr>
<td>Idaho</td>
<td>5 (4)</td>
<td>0</td>
</tr>
<tr>
<td>Montana</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nevada</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Oregon</td>
<td>13</td>
<td>49</td>
</tr>
<tr>
<td>Utah</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Washington</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Wyoming</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sum</td>
<td>46 (40)</td>
<td>69</td>
</tr>
</tbody>
</table>

*a Discrepancies in Total Monitored between Tables 1 and 2 and 3 are due to rolling up of colonies in to complexes in the population estimate analysis.*
Table 2. Double-crested Cormorant Western Breeding Population Estimates, 2016 and 2015

<table>
<thead>
<tr>
<th>Colony Size (Breeding Pairs)</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Colonies Sampled</td>
<td>Colonies per size class estimate</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5,000-500</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>499-100</td>
<td>25</td>
<td>74</td>
</tr>
<tr>
<td>99-5</td>
<td>16</td>
<td>73</td>
</tr>
<tr>
<td>List Frame</td>
<td>45</td>
<td>151</td>
</tr>
<tr>
<td>Area Frame</td>
<td>65</td>
<td>224</td>
</tr>
</tbody>
</table>

Sum of Frames
Total Individuals

Variance Around Population Estimates

<table>
<thead>
<tr>
<th></th>
<th>Population Estimate</th>
<th>Standard Error</th>
<th>CV %</th>
<th>Estimated LCL</th>
<th>Estimated UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>Pairs</td>
<td>38,153</td>
<td>3,051</td>
<td>8.0%</td>
<td>32,172</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>76,306</td>
<td>6,103</td>
<td>8.0%</td>
<td>64,345</td>
</tr>
<tr>
<td>2015</td>
<td>Pairs</td>
<td>37,301</td>
<td>2,127</td>
<td>5.7%</td>
<td>33,132</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>74,601</td>
<td>4,253</td>
<td>5.7%</td>
<td>66,265</td>
</tr>
</tbody>
</table>

¹– LCL = Lower Confidence Limit; UCL = Upper Confidence Limit
Table 3. Double-crested Cormorant Western Population Estimates, 2015 and 2014

<table>
<thead>
<tr>
<th>Colony Size (Breeding Pairs)</th>
<th>2015</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Colonies Sampled</td>
<td>Colonies per size class estimate</td>
</tr>
<tr>
<td>&gt;5,000</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5,000-500</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>499-100</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>99-5</td>
<td>26</td>
<td>107</td>
</tr>
<tr>
<td>List Frame</td>
<td>49</td>
<td>154</td>
</tr>
<tr>
<td>Area Frame</td>
<td>74</td>
<td>224</td>
</tr>
<tr>
<td>Sum of Frames</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Individuals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Variance Around Population Estimates

<table>
<thead>
<tr>
<th></th>
<th>Population Estimate</th>
<th>Standard Error</th>
<th>CV %</th>
<th>Estimated LCL</th>
<th>Estimated UCL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Pairs</td>
<td>37,301</td>
<td>2,127</td>
<td>5.7%</td>
<td>33,132</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>74,601</td>
<td>4,253</td>
<td>5.7%</td>
<td>66,265</td>
</tr>
<tr>
<td>2014</td>
<td>Pairs</td>
<td>36,719</td>
<td>1,611</td>
<td>4.4%</td>
<td>33,562</td>
</tr>
<tr>
<td></td>
<td>Individuals</td>
<td>73,437</td>
<td>3,221</td>
<td>4.4%</td>
<td>67,124</td>
</tr>
</tbody>
</table>

¹ – LCL = Lower Confidence Limit; UCL = Upper Confidence Limit
Dusky Canada Goose Subcommittee
Joe Sands, USFWS Region 1

Population Status
Population status will be discussed at the fall 2017 meeting.

Harvest Information
No information was presented on harvest.

Management Activity
The subcommittee discussed the ongoing collar resight effort in Oregon and Washington. Oregon has two seasonal employees whose full-time duties are collar resighting. One employee focuses on the southern half of the Willamette Valley and has been on staff since November. The other employee focuses on the northern half of the Willamette Valley and Sauvie Island. USFWS Refuge staff are reading collars on refuge properties two to three times a month on Finley, Ankeny, Baskett Slough, Tualatin River, and Wapato Lake National Wildlife Refuges. Four red collars have been read by Oregon Coast National Wildlife Refuge staff as well.

Todd Sanders (USFWS) presented results of a survival analysis based on collar resighting. A report on the assessment with data through 2016 was completed and distributed via e-mail to the subcommittee, and an annual assessment will be completed and reported at the fall Study Committee meeting each year (this fall report will include data through 2017).

Research Activity
No information on research activity was presented.

Recommendations
No recommendations were made.
Eagles Subcommittee
Allison Begley, Montana
James Driscoll, Arizona

U.S. Fish and Wildlife Service Eagle Technical Assessment Team (ETAT)
Since March 2016, Pacific Flyway Nongame Technical Committee (PFNTC) representatives participated in six ETAT conference calls. The ETAT continues to concentrate on national level eagle issues related to:

1. Revision to the Bald and Golden Eagle Protection Act (BGEPA) Programmatic Environmental Impact Statement. This document was released on May 6 for public comment. The Pacific Flyway Council (Council) provided comments on June 28, and the rule was finalized on November 10, 2016. The U.S. Fish and Wildlife Service (USFWS) modified language in the Final Rule to address four of Council’s concerns:
   a. Separate Alaska (AK) Bald Eagles into another Eagle Management Unit with its own take rate. The final rule was modified from two Eagle Management Units into three within the Pacific Flyway, AK, 40th parallel to Canada, 40th parallel to Mexico. Take rates for Bald Eagles are now 6.0% AK, 6.0% 40th parallel to Canada, 3.8% 40th parallel to Mexico.
   b. The preservation standard accounting for persistence of local populations and would create local area population sinks. The preservation standard in the final rule was modified to include, “and the persistence of local populations throughout the geographic range of each species.”
   c. The implementation of a cumulative effects analysis for the local area populations for both species.
   d. Clarity in the required USFWS approved data standards. The final rule clarified that project proponents are required to use USFWS approved protocols, conducted by independent third parties who are approved by, and report to, the USFWS.

2. Midwest Multistate Wind Habitat Conservation Plan. The Midwest states created a Habitat Conservation Plan to allow for incidental take of eagles due to impacts from wind energy facilities. The USFWS touted this mechanism as an efficient way for states to address the impacts of take across broad landscapes.

3. Golden Eagle Management Guidance. The ETAT is addressing various items relating to management guidance for eagles:
   a. Nest Buffer Zones. Due to the lack of research on nest disturbance distances for Golden Eagles, the ETAT is soliciting the opinions from Golden Eagle experts across the nation to determine the appropriate distances to buffer various human activities to avoid “take” in the form of disturbance.
   b. The value of roosts. Research is unclear on the value of communal roosts and the impact that disturbance or modification of identified roosts may have on populations.
4. Defining risk for fatality predictions when permitting take. Current permitting practice to determine take rates for fatality predictions of a project is to define risk. Risk is calculated using eagle movements during daylight hours within the project area. However, eagles move at night. The ETAT is examining the definition of an “eagle movement” and how much of that movement occurs at night.

5. The use of video surveillance in lieu of personnel to monitor bird detections at wind facilities. In an attempt to reduce monitoring costs associated with personnel monitoring bird activity at wind farms, wind industry is investigating the use of remote sensing technology to determine the presence of large raptors and shut down turbines in the area to avoid take. An independent third party is researching the technology, which will help the USFWS determine the associated risk of take.

6. Flyway representation on ETAT. The USFWS reiterated that the flyway representatives are in a unique position in the USFWS regulatory process. The Memorandum of Understanding created/signed by the USFWS allows for state participation in the federal regulatory process that is normally restricted to USFWS personnel. All states should be comfortable with using the flyway representatives as a mechanism to surface concerns with the administration and implementation of any regulation/policy/guidance related to eagles.

7. Revisions to the eagle rule schedule. ETAT members were advised that the rule authorizing incidental take under the BGEPA is scheduled for revision every six years. However, minor revisions and clarifications will continue to occur as needed. In the foreseeable future, the USFWS anticipates addressing:
   a. Any questions related to the implementation of the incidental take permits.
   b. Updating the fatality predictions models.
   c. Reanalyzing the eagle density maps for the local area population analysis.
   d. Finalizing the Nest Disturbance Elicitation to develop a comprehensive management guidance document.
Population Status
The 2016 Lesser Canada Goose breeding index was 4,600, 49% higher than the 2015 index of 3,100 (Table 14 and Figure 17.1 in Groves 2016a). The 2016 total index was 6,600, 64% higher than the 2015 index of 4,000. From 2007 to 2016, indices of total geese decreased by 10% per year ($P = 0.050$), whereas indices of breeding geese did not have a significant trend ($P = 0.386$; Groves 2016a). The estimated long-term (1964-2016) and short-term (2007-2016) average annual growth rates of indicated total Taverner’s Canada Geese were 0.987 ($SE = 0.004$, 95% CI = 0.980 – 0.995) and 0.957 ($SE = 0.023$, 95% CI = 0.908 – 1.010; Groves 2016b).

Harvest Information

Management Activity
The Management Plan for this goose population has been in draft form since 1994. During the winter Study Committee working meeting, Kyle Spragens, Washington, volunteered to assess any data related to this population and report back to the group during the March meeting. The subcommittee was presented a summary of existing datasets related to breeding indices from Alaska, sport harvest estimates from Washington, subsistence harvest estimates from the Yukon-Kuskokwim Delta, and telemetry datasets demonstrating the migratory tendencies of both Taverner’s and Lesser Canada Geese. From USFWS aerial survey work in Alaska, Taverner’s Geese show long-term and short-term declines. The long-term decline seems to be driven by decreases in Kotzebue Sound and the interior strata of the Yukon-Kuskokwim Delta. Spragens suggested there is enough information to revisit the Management Plan and will work with David Safine, USFWS Region 7, and Josh Dooley, Arctic Goose Joint Venture Science Coordinator, USGS Alaska Science Center in reanalyzing and evaluating these aerial survey datasets and current management indices.

Research Activity
No information on research activity was presented.

Recommendations
No recommendations were made.

Pacific Brant Subcommittee
David Safine, USFWS Region 7

The Pacific Brant subcommittee convened on March 1, 2017 to make progress towards finalizing the management plan for Pacific Brant at the fall meeting.

Population Status
A Brant species account from Conservation of Arctic Flora and Fauna is anticipated to be finalized this spring. The current draft version of the document contains new information on Brant status in Russia. Population status will be discussed in detail at the fall 2017 meeting.

Harvest Information
A brief discussion about harvest occurred, and there is some concern that harvest in Mainland Mexico could be increasing.

Management Activity
The subcommittee discussed the organization and content of the management plan, and agreed to have all comments sent to the revision coordinator (Melanie Weaver) by April 15th, 2017. The draft plan will be sent to Council by July 1st, 2017.

Research Activity
No information on research activity was presented.

Recommendations
No recommendations were made.
Pacific Coast Population Sandhill Crane Subcommittee
Brandon Reishus, Oregon

Population Status
Population status will be discussed at the fall 2017 meeting.

Harvest Information
No information was presented on harvest.

Management Activity
The management plan for the Pacific Coast Population (PCP) of Sandhill Cranes is currently under revision and was discussed. The plan has not been updated since 1983. The subcommittee met to discuss current issues with the plan revision. Discussion focused on revising the plan to incorporate Pacific Flyway cranes that breed in south central and southeast Alaska and winter in Oregon and California. Also discussed were habitat management objectives and research priorities.

The Plan committee lead (U.S. Fish and Wildlife Service, Region 1) will continue to incorporate comments and edits from the subcommittee during spring 2017. Progress on the Plan to this point should allow completion by fall 2017.

Research Activity
No information on research activity was presented.

Recommendations
No recommendations were made.
Rocky Mountain Population Trumpeter Swan Subcommittee
Claire Gower, Montana

**Population status.** Dave Olson (U.S. Fish and Wildlife Service, Region 6) reported that no winter survey was conducted during February 2017. The survey ceased February 2015 and the fall survey is now the primary monitoring effort for the Rocky Mountain Population (RMP) U.S. breeding segment including data from the Tristate area (Montana, Idaho and Wyoming) and restoration flocks (Oregon, Nevada, and Flathead Valley, Montana).

Observers counted 944 Trumpeter Swans (731 white birds and 213 cygnets) in the U.S. breeding segment in the September 2016 survey compared to a total of 968 Trumpeter Swans (718 white birds and 250 cygnets) in 2015. The total number of birds counted in the fall 2016 for the Tristate was 721 (578 white birds and 143 cygnets) compared to 723 (548 white birds and 175 cygnets) in 2015. The number of birds counted in the restoration flocks was 223 (153 white birds and 70 cygnets) compared to a total of 245 (170 white birds and 75 cygnets) counted in 2015. The fall report shows the break down by state.

**Harvest Information.** For the 2016-2017 season, Utah reported a harvest of 764 Tundra Swans and 4 Trumpeter Swans (853 Tundra Swans and 4 Trumpeter Swans last year). Nevada harvested 132 Tundra Swans and 2 Trumpeter Swans (8 Tundra Swans and zero Trumpeter Swans last year). Montana’s preliminary harvest estimate indicates 207 Tundra Swans and 17 Trumpeter Swans (250 Tundra Swans and 14 Trumpeter Swans last year). Montana had an 83% compliance rates based on bill cards this year.

**Management Activities.** Restoration projects are ongoing in MT, WY, OR and ID.

In 2016 in Montana, the Confederated Salish Kootenai Tribes Flathead Indian Reservation released six yearlings from the Montana Waterfowl Federation; the Blackfoot Valley project released eight cygnets from the Wyoming Wetlands Society (WWS); the Middle Madison project released five cygnets from the WWS.

Two, one-day old cygnets from WWS were grafted onto Grebe Lake, and three, 90-day old cygnets were released at Seven-Mile Meadow, along the Madison River, in Yellowstone National Park (YNP).

Four yearlings from the WWS were released in Teton Valley, Idaho in spring 2016.

In Oregon, 13 cygnets were translocated to Summer Lake Wildlife Area (SLWA); five from WWS, four from the Alaska Zoo, two from the Whatcom Humane Society Wildlife Center, WA, and two from the Sunriver Nature Center, OR.

As part of the 2017 allocation process document, one of the allocation requirement for projects receiving and requesting birds from the Wyoming Wetlands Society is to provide a verbal and written update at the Greater Yellowstone Trumpeter Swan Working Group Meeting on the status of your respective projects and where the project is in relation to objective. Reporting should state the origin of the birds. These reports are needed from project leads that want to continue obtaining birds from WWS and maintain priority status. Claire Gower circulated these reports to the PF RMP Trumpeter Swan subcommittee.
Claire Gower (MT) has been working on the revision of the management plan. Scheduled completion date is September 2017.

The Greater Yellowstone Trumpeter Swan Working Group met in West Yellowstone, MT, February 16th-18th. Twenty-five people representing state, federal, and private organizations attended.

**Partner Updates.** Gary Ivey shared the following updates from The Trumpeter Swan Society (TTSS). They continue to partner with the four flyway councils and the National Flyway Council in implementing important conservation activities for the benefit of Trumpeter Swans and the North American public. See the attached letter.

**Research.** Greg Neudecker, Kevin Barnes, and Sean Fields (USFWS) are continuing to develop the habitat suitability model. This spatially explicit decision support tool will hopefully be used to determine suitable sites and guide future trumpeter swan restoration in the greater Tri State areas. A conference call, to discuss progress, will be planned for this spring.

**Recommendation.** There are three recommendations from the subcommittee:

1) The subcommittee recommends Council approve the following allocation of trumpeter swan cygnets from the Wyoming Wetlands Society (WWS) facility for release at approved restoration sites in 2017: Blackfoot River Valley, MT – 7; Summer Lake Wildlife Area, OR – 5; Middle Madison River, MT – 5; Yellowstone National Park – 6 and Teton Basin, ID – 7. The allocation depends on hatching success during spring 2017 and is subject to change.

2) The subcommittee recommends Council send a letter to the USFWS Headquarters permits office pertaining to the requirement for Waterfowl Sale and Disposal Permits relating to release of captively-reared trumpeter swans for Pacific Flyway approved restoration programs.

3) The subcommittee recommends Council send a letter to the USFWS DMBM to request support for the fall RMP Trumpeter Swan productivity survey (i.e., Centennial Valley, MT, and Yellowstone National Park).
National Flyway Council
Pacific, Central, Mississippi and Atlantic Flyway Councils

Dear Council Members,

On behalf of the Directors of The Trumpeter Swan Society (TTSS), I would like to share some items of importance in Trumpeter Swan conservation for 2017. TTSS is pleased to continue as a partner with the four Flyway Councils and the National Flyway Council in implementing important conservation activities for the benefit of Trumpeter Swans and the North American public.

- TTSS Directors, staff and associates continue to be available to assist in updating Flyway Management Plans for Trumpeter Swans. We are members of the swan committees in all four flyways.

- TTSS remains committed to advocating for the 2020 Trumpeter Swan Rangewide Survey and hope to work with partners in all four flyways to assist with survey planning and funding support. We will assist the survey committee in a comprehensive review of Trumpeter Swan status assessment to improve its efficiency while meeting future swan conservation and management needs.

- The 2015 Range-wide Survey recorded over 60,000 trumpeter swans across North America which is cause for celebration. However, Rocky Mountain Population flocks in the western states totaled only 765 white birds. These western flocks are experiencing very slow growth and are disjunct, some are very isolated and are at high risk of extinction, and connectivity between flocks is poor. Our Board has recognized the need to work with partners on growing these flocks and improving their connectivity to build a healthy metapopulation among these U.S. flocks as a strategic priority.

- TTSS encourages the Service to finalize the draft Environmental Assessment (EA) regarding general swan hunts and to include the 2015 North American Trumpeter Swan Survey results. A finalized EA will be very useful to updating appropriate swan plans, including the 1998 Mississippi and Central Flyway Management Plan for the Interior Population of Trumpeter Swans.

- Our 24th Trumpeter Swan Society Conference, held last November on Vancouver Island in British Columbia, was a great success. We thank the Pacific and Central flyways for sponsoring the conference. The conference theme was “Swans and Agriculture. Working
Mourning Dove and White-winged Dove Subcommittee
Johnathan O’Dell, Arizona
Melanie Weaver, California

National Dove Task Force
The Pacific Flyway Study Committee has two members serving on the National Dove Task Force. At the October, 2016 meeting in Fort Collins, Colorado the members worked on 3 priority items:

1. A response letter/position statement to the SRC regarding requests for framework changes to the Mourning Dove Harvest Strategy.
2. White paper for a suggested HIP Revision Model.
3. Draft proposal for a future mourning dove reward banding study due to band inscriptions changing to an all web reporting.

Preliminary work on data analysis of Modified Call Count Survey was shared and the surveys will continue for 2017 as the final year.

Management Plans
Both the WMU Mourning Dove and Western White-winged Dove Management Plans are in need of revision/review; most recent versions are 1992 and 2003, respectively. The White-winged Dove plan is scheduled to be presented to Council in fall 2019. The need for revision of the Mourning Dove plan will be investigated for the fall 2017 meeting.