Agenda Item H.3.a Supplemental USFWS Report Novembe<u>r 2015</u>



United States Department of the Interior

FISH AND WILDLIFE SERVICE Ventura Fish and Wildlife Office 2493 Portola Road, Suite B Ventura, California 93003

IN REPLY REFER TO: FWS/R8/VFWO

November 12, 2015

Dorothy Lowman, Chair Pacific Fishery Management Council 7700 NE Ambassador Place, #101 Portland, Oregon 97220

Subject: Agenda Item H.3-Anchovy General Status Overview

Dear Ms. Lowman and Council Members:

We, the U.S. Fish and Wildlife Service, are submitting this report as a follow-up to an earlier report we submitted to the Council for its June 2015 meeting under Agenda Item G.3–Anchovy Update. In that report we shared information with the Council regarding California brown pelican (*Pelecanus occidentalis californicus*) mortality events and breeding failures in recent years and expressed our concern regarding the continued availability of northern anchovy (*Engraulis mordax*) for California brown pelicans and other marine predators in the California Current Ecosystem.

We are pleased that the Council has solicited and received information on the status of northern anchovy and will consider whether to approve a review of proposed alternate methodologies for assessing Coastal Pelagic Species stocks. However, we are concerned about continuing indications that the central subpopulation may be much smaller than it was when the Annual Catch Limit (ACL) was adopted. Of particular concern is the low northern anchovy biomass off southern California, as indicated by aerial surveys documented in the California Department of Fish and Wildlife report (Agenda Item H.4.a.), including the summer 2015 aerial survey, during which there were no detections of northern anchovy. MacCall et al. (in press) estimate the northern anchovy biomass off southern California at less than 20,000 metric tons (MT) (confidence interval (CI) < 100,000 MT). While northern anchovy fishing effort in southern California has been negligible, preliminary statewide landings had reached 13,508 MT as of October 15, 2015. Under the current ACL of 25,000 MT, continued fishing pressure may affect the ability of the central subpopulation to support dependent predators such as brown pelicans or

¹ MacCall, A.D., W.J. Sydeman, P.C. Davison. J.A. Thayer. In press. Non-Fishery Collapse of Northern Anchovy off California. Fisheries Research.

² California Department of Fish and Wildlife. 2015. Coastal Pelagic Species–Highly Migratory Species Project. October 15.

compromise the resilience of the stock itself. We therefore urge the Council to consider adopting interim measures regarding the harvest of the central subpopulation of northern anchovy while a full stock assessment is underway.

We thank the Council for its commitment to ecosystem-based management of fisheries. If you have questions regarding this letter, please feel free to contact Lilian Carswell, of my staff, at (805) 612-2793 or Lilian_Carswell@fws.gov.

Sincerely,

acting Stephen P. Henry
Field Supervisor

Relevant Literature

- Anderson, D.W. and F. Gress. 2015. Widespread breeding failure in Gulf of California Brown Pelicans in 2014. Pacific Seabird Group Annual Meeting, San Jose, CA. Abstract.
- Anderson, D.W., F. Gress, and K.F. Mais. 1982. Brown pelicans: influence of food supply on reproduction. Oikos 39:23-31.
- Anderson, D.W., F. Gress, K.F. Mais, and P.R. Kelly. 1980. Brown pelicans as anchovy stock indicators and their relationships to commercial fishing. Cal. Coop. Ocean. Fish. Invest. Rep. 21:54-61.
- Anderson, D.W., C.J. Henny, C. Godinez-Reyes, F. Gress, E. Palacios, K. Santos del Prado, J.P. Gallo-Reynoso, and J. Bredy. 2013. Size and distribution of the California brown pelican metapopulation in a non-ENSO year. Marine Ornithology 41:95–106.
- Bechaver, C.A., G.J. McChesney, P.J. Capitolo, R.T. Golightly, A.R. Fuller, H.R. Carter, M.W.
 Parker, and S.J. Rhoades. 2013. Breeding population trends of Brandt's cormorants in the Monterey Bay Area, California, 2001-2011. Unpublished report. Humboldt State University, Arcata, CA and U.S. Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex, Fremont, CA. 43 pp.
- Elliott, M.L., R.W. Bradley, D.P. Robinette, and J. Jahncke. 2015. Changes in forage fish community indicated by the diet of the Brandt's cormorant (*Phalacrocorax penicillatus*) in the central California Current. Journal of Marine Systems 146:50-58.
- Fuller, A.R., G.J. McChesney, S.J. Rhoades, C.S. Shake, C.A. Bechaver, M. Parsons, E.J. Taketa, J.D. Tappa, E. Haber, and R.T. Golightly. 2013. Restoration of common murre colonies in central California: annual report 2012. Unpublished report. U.S. Fish and Wildlife Service, San Francisco Bay National Wildlife Refuge Complex, Fremont, CA and Humboldt State University, Department of Wildlife, Arcata, CA. 71 pp.
- Gibble, C., H. Nevins, G. McChesney, L. Eigner, S. Rhoades, P. Capitolo, S. Lyday, J. Hall, J. Roletto, J. Jahncke, S. Acosta, P. Warzybok, R. Bradley, B. Merkle, K. Schuler, and M. Bellizzi. 2010. The 2009 central California Brandt's cormorant (*Phalacrocorax penicillatus*) die-off and breeding failure event. Pacific Seabird Group Annual Meeting, Long Beach, CA. Abstract.
- Gress, F., P.R. Kelly, D.B. Lewis, and D.W. Anderson. 1980. Feeding activities and prey preference of brown pelicans breeding in the Southern California Bight. Unpublished report. California Department of Fish and Game, Sacramento, CA. 38 pp.
- Gress, F., D.B. Lewis, W.T. Everett, and D.W. Anderson. 1990. Reproductive success and status of brown pelicans in the Southern California Bight, 1988-1989. Unpublished report. California Department of Fish and Game, Sacramento, CA. 55 pp.
- Harvey, A.L. 2008. California brown pelican nesting parameters, prey distributions, and oceanographic conditions from 1986-2005. Unpublished M.Sc. thesis, San Diego State University. 50 pp.

- Harvey, A.L., D.M. Mazurkiewicz, M. McKown, K.W. Barnes, M.W. Parker, and S.J. Kim. 2013. Ashy storm-petrel, Scripps's murrelet, and Cassin's auklet reproductive status assessments and restoration recommendations in 2011-2012. Unpublished report, California Institute of Environmental Studies. 55 pp.
- Harvey, A.L. and D.M. Mazurkiewicz. 2015. California brown pelican and double-crested cormorant breeding status on Anacapa Island, California in 2014. Unpublished report. Sutil Conservation Ecology.
- Hayward, T.L. 2000. El Niño 1997-98 in the coastal waters of southern California: a time-line of events. Cal COFI Report 41:98-116.
- Horton, C. A. and R.M. Suryan. 2012. Brown pelicans: a new disturbance source to breeding common murres in Oregon? Oregon Birds 38(2):84-88.
- Jaques, D.L. 2014. Brown pelican injury prevention project: northern California harbors. Pacific Eco Logic report to the Kure/Stuyvesant Trustee Council. Unpublished report. 36 pp.
- Leising, A.W. and 36 other authors. 2014. State of the California Current 2013-14: El Niño looming. CalCOFI Reports 55:51-87.
- McChesney, G. 2013. Electronic mail correspondence regarding brown pelican disturbance to common murre colonies. Dated May 17, 2013.
- Nevins, H., M. Miller, L. Henkel, D. Jessup, N. Carion, C. Meteyer, K. Schuler, J. St. Leger, L. Woods, J. Skoglund, and D. Jaques. 2011. Summary of unusual stranding events affecting brown pelican along the U.S. Pacific Coast during two winters, 2008-2009 and 2009-2010.
- Sydeman, W.J., S.A. Thompson, J.A. Santora, A.J. Koslow, R. Goericke, and M.D. Ohman. 2015. Climate-ecosystem change off southern California: Time-dependent seabird predator-prey numerical responses. Deep Sea Research Part II: Topical Studies in Oceanography 112:158-170.
- U.S. Fish and Wildlife Service. 1983. The California brown pelican recovery plan. Portland, OR. 179 pp.
- U.S. Fish and Wildlife Service. 2007. Listed distinct population segment of the brown pelican (*Pelecanus occidentalis*) 5-year review: Summary and evaluation. Southwestern Regional Office, Albuquerque, NM. 64 pp.
- Warzybok, P.M, R.W. Berger, and R.W. Bradley. 2013. Status of seabirds on Southeast Farallon Island during the 2013 breeding season. Unpublished report to the U.S. Fish and Wildlife Service. Point Blue Conservation Science, Petaluma, CA. Point Blue Contribution Number 1960.