2016-2017 Chesapeake Bay Program Black Duck Action Team Workplan

PREFACE

The purpose of the biennial workplan is to identify conservations steps to be taken over years 2016-2017 towards achieving the black duck outcome: "*By 2025, restore, enhance and preserve wetland habitats that support a wintering population of 100,000 black ducks…"* Included in this plan are four **Management Approaches** that our partnership will seek to carry out to meet the black duck outcome. Although the **Approaches** and **Key Actions** detail steps to be taken, some incrementally, we wish to execute the Actions of this workplan concurrently, and under two directives. Key **Actions 1** through **3** are to establish habitat targets to gain ground on habitat loss projections while **Actions 5** and **6** are to refine existing targets to mitigate habitat loss under current rates. The first directive involves the completion and delivery of decision support tool to evaluate future landscape conditions. The bioenergetics model will map food availability across the landscape and incorporate sea-level rise and urban development projections to identify vital habitat for black ducks within the Chesapeake Bay watershed. The support tool will guide decisions made towards vital habitat restoration, enhancement, protection and other future conservation efforts through the 2025 black duck outcome. The information from this tool will also be used to refine targets under **Key Actions 4, 5** and **6**. The intent of the second directive is to establish interim targets for and to maintain conservation efforts in known black duck areas under current landscape conditions. Goals established under **Key Actions 5** and **6** should seek to mitigate current wetland loss rates.

The intent of **Management Approach 4** is to ensure that smaller and more local conservation groups and actions are informed of the progress and efforts of the Habitat GIT and black duck team. Inclusion of these entities is imperative so our habitat restoration efforts can work in concert rather than independently. Outreach programs and cross-GIT coordination may remove obstacles to restoration for these groups by introducing them to funding opportunities, programs, and other restoration resources.

Key Action 8 highlights the obstacles that partners may encounter during wetland restoration permit acquisition. According to a Nature Conservancy and Ducks Unlimited 2015 report, permitting issues were prohibitive for smaller conservation groups. Partners should work to review the permitting process for smaller entities to streamline permit acquisition. This **Action** works in conjunction with **Action 7** to ensure partners are informed of the most appropriate resources and can be directed to the proper permitting outlet. Reducing the burden of time and investment in inquiry for these smaller groups may also incentivize their participation in wetland restoration efforts.

While **Key Action 9** is not emphasized in this workplan, the potential benefits from the auxiliary work should be included and documented as they pertain to black duck areas. There are species-specific conservation actions within the Chesapeake Bay watershed that may provide ancillary benefits to the black duck

outcome. Namely, controlling predation of other wetland bird breeding sites. Relieving predation pressure in wetlands and other areas where black ducks occur, or may occur, may benefit both breeding and wintering populations.

Habitats Goal: Restore, enhance and protect a network of land and water habitats to support fish and wildlife, and to afford other public benefits, including water quality, recreational uses and scenic value across the
Black Duck Outcome: By 2025, restore, enhance and preserve wetland habitats that support a wintering population of 100,000 black ducks, a species representative of the health of tidal marshes across the watershed. Refine population targets through 2025 based on best available science.
Long term Target: Habitat for 100,000 wintering black ducks by 2025.
2 year Target: By 2017: X # acres of viable black duck wintering habitat restored, enhanced and/or preserved.

Management Approach 1: Restore degraded wetlands or vegetation in areas where black ducks have historically bred or wintered.					
Key Action: Habitat Restoration *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
1. Complete energetics models for several USFWS Refuges that will help define food availability for black ducks. Scientists will forecast the potential loss of habitats from sea-level rise and development to better understand food availability changes in the face of these two potential habitat stressors.		USGS, USFWS, BDJV, ACJV, State Partners, etc.		September 2016	
2. Develop a decision support tool to estimate wintering black duck habitat needs under current and future landscape conditions throughout the ACJV and the Atlantic Flyway and scale it to the Chesapeake Bay Watershed, and incorporate maps to show target areas.	a. Determine location and acreage of black duck winter habitat within respective jurisdictions for acquisition b. Prioritize black duck winter habitat based on profitability and vulnerability	USGS, USFWS, BDJV, ACJV, DU, State Partners, etc.	ACJV	DST - June 2016 Targets - 2017	Lack of comprehensive process to track and report wetland restoration. Also lacking uniform or systematic wetland designation in reporting finer scale decisions can be made based on wetland type.
3. Use the decision support tool to determine best places to do restoration, enhancement, management of key wetland or upland habitat for wintering, breeding or migrating black ducks.	Identify 3-4 key areas for partners to concentrate acquisition/restoration efforts	USGS, USFWS, BDJV, ACJV, DU, State Partners, etc.	Chesapeake Bay watershed	June-August 2016	
4. Restore tidal wetland hydrology and restore key habitat for breeding, migration routes and wintering grounds.	a. Continue/enhance restoration efforts in known black duck areas b. Use decision support tool to identify new priority locations	USFWS, State Agencies, DU, etc.	Current wetland restoration areas in Chesapeake Bay watershed Target areas in the Chesapeake Bay watershed, as identified by the support tool	Ongoing	

Management Approach 2: Enhance and manage wetlands or vegetation in areas where black ducks have historically bred or wintered.

Key Action: Habitat Enhancement and Management *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
5. Improve water level management on managed wetlands (replace compromised water control structures, leaking levees, etc. to improve management capability), restore SAV or converted wetlands, manage open marsh (to restore non-tidal waters back to salt marsh, for example), restore and manage riparian buffers, etc.	Enhance and manage priority habitats as identified by the support tool (how many water control structures replaced or installed, acres of habitat made available/enhanced, etc.)	USFWS, State Agencies, DU, etc.	Target areas in the Chesapeake Bay watershed, as identified by the support tool	Ongoing	Lack of comprehensive process to track and report wetland enhancement.
Management Approach 3: Protect wetlands or vegetation in areas where black ducks have historically bred or wintered.					
Key Action: Habitat Protection *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
6. Protect key black duck habitats via long term protection actions such as fee title acquisition, conservation easements, cooperative agreements, or leases.	a. Prioritize known black duck areas for protection	USFWS, State Agencies, DU, etc.	Chesapeake Bay watershed	Ongoing	Lack of comprehensive process to track and report wetland enhancement.
	b. Develop a NFWF proposal to provide assistance to partners in protection actions listed here			May 2016	
	c. Protect priority habitats as identified by the support tool (acres of coastal marsh, forested wetlands, etc. protected)		Target areas in the Chesapeake Bay watershed, as identified by the support tool	Ongoing	
Management Approach 4: Ensure appropriate planning tools and technical support are available at the local level.					
Key Action: Habitat Restoration *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
7. Keep local officials engaged and informed. (use Cross-GIT coordinator to figure out how/if that is reflected in Local Leadership Workplan.) - healthy watersheds?	Communicate with Local Leadership Workgroup to discuss extension program or inclusion of decision support tool into LLW's content.	Conservation organizations, local governments, state agencies, etc.	Entire Chesapeake Bay watershed, and throughout the ACJV	August 2016	
8. Review regulations and permitting processes regarding wetland protection, restoration, and management to streamline planning and development of conservation actions.		Conservation organizations, local governments, state agencies, etc.	Entire Chesapeake Bay watershed, and throughout the ACJV	Ongoing	
9. Evaluate the effects of possible hybridization and disease transmission from captive-bred released waterfowl. Track predator management programs that may benefit wintering or breeding black duck populations.		USFWS, State Agencies, DU, etc.		Ongoing	

10. The Chesapeake Bay Commission will work collaboratively with the Bay Program partners to identify legislative, budgetary and policy needs to advance the goals of the Chesapeake Watershed Agreement. We will, in turn, pursue action within our member state General Assemblies and the United States Congress. See CBC Resolution #14-1 for additional information on the CBC's participation in the management strategies.		CBC	Chesapeake Bay Watershed	Ongoing	

Acronym Guide (for all workplans)

AACC – Anne Arundel Community College
ACFHP - Atlantic Coast Fish Habitat Partnership
ACJV – Atlantic Coast Joint Venture
AgNPS – Agricultural Non-Point Source Pollution Model
Appalachian LCC - Appalachian Landscape Conservation Cooperative
ASTSWMO – Association of State and Territorial Solid Waste Management Officials
BayFAST/CAST/MAST/VAST – Federal Assessment Scenario Tool/Chesapeake AST/Maryland AST/Virginia AST
BDJV – Black Duck Joint Venture
BKT – Brook trout
BMP – Best Management Practice
CAC – CBP Citizens' Advisory Committee
CAFO – Concentrated Animal Feeding Operation
CB – Chesapeake Bay
CBC – Chesapeake Bay Commission
CBF – Chesapeake Bay Foundation
CBIBS – Chesapeake Bay Interpretive Buoy System
CBIG – Chesapeake Bay Implementation Grants
CBP – Chesapeake Bay Program
CBPO – Chesapeake Bay Program Office
CBRAP – Chesapeake Bay Regulatory and Accountability Program grants
CBSAC – Chesapeake Bay Stock Assessment Committee
CBSSC – Chesapeake Bay Sentinel Site Cooperative
CBT – Chesapeake Bay Trust
CCWC – Choose Clean Water Coalition
CEAP – Conservation Effects Assessment Project
Chessie BIBI – Chesapeake Bay Basin-wide Index of Biotic Integrity
CNMP – Comprehensive Nutrient Management Plan
CNU – Christopher Newport University
CRC – Chesapeake Research Consortium
CREP – Conservation Reserve Enhancement Program
CSN – Chesapeake Stormwater Network
CWA – Clean Water Act
DAT – CBP Diversity Action Team
DC – District of Columbia
DCNR – Pennsylvania Department of Conservation and Natural Resources
DE – Delaware
DEP – Department of Environment
DE DNREC – Delaware Department of Natural Resources and Environmental Control
DNR –Department of Natural Resources
DoD – Department of Defense

DOEE – Dist. Of Columbia Department of Energy and Environment
DOF – Department of Forestry
DOT – Department of Transportation
DST – Decision support tool
DU – Ducks Unlimited
EC – Chesapeake Executive Council
EJ SCREEN – Environmental Justice Screening and Mapping Tool
EO Strategy – Executive Order 13508 Strategy for Protecting and Restoring the Chesapeake Bay Watershed
EJ – Environmental Justice
EL – Environmental Learning
ELCSS – Environmental Literacy Challenge for Systemic Sustainability
ERP – Elizabeth River Partnership
EPA – Environmental Protection Agency
Ex Comm - Executive Committee of the Sustainable Fisheries GIT
FERC – Federal Energy Regulatory Commission
FOD – Chesapeake Bay Program Federal Office Directors
FTE – full time employee
FWG – Forest Work Group
FWS – Fish and Wildlife Service
GIS – Geographic Information System
GIT – CBP Goal Implementation Teams
GMU – George Mason University
GSA – General Services Administration
HBCUs – historically black colleges and universities
HSCD – EPA Hazardous Site Cleanup Division
HWGIT – Healthy Watershed Work Group
ICPRB – Interstate Commission on the Potomac River Basin
IPC – Interfaith Partners for the Chesapeake
LCC – Landscape Conservation Cooperatives
LGAC – CBP Local Government Advisory Committee
LL – Local Leadership
LU – Land Use
LUWG – Land Use Work Group
MATOS - Mid-Atlantic Telemetry Observing System
MB – CBP's Management Board
MD - Maryland
MDE – Maryland Department of Environment
MDSG – Maryland Sea Grant
MOU – Memorandum of Understanding
MSP – Math Science Partnership
MS4 – Municipal Separate Storm Sewer System
MWCOG – Metropolitan Washington Council on Governments
MWEEs – Meaningful Watershed Educational Experiences
MWS – Master Watershed Stewards
NAAQS – National Ambient Air Quality Standards
NALCC - North Atlantic Landscape Conservation Cooperative
NATA – National Air Toxics Assessment
NCBO – NOAA Chesapeake Bay Office

NGO – Non-government organization
NEIEN – National Environmental Information Exchange Network
NERR – Chesapeake Bay National Estuarine Research Reserve
NFWF – National Fish and Wildlife Foundation
NOAA – National Oceanic and Atmospheric Administration
NP – National Parks
NPDES – National Pollutant Discharge Elimination System
NRCS – Natural Resources Conservation Service
NPS – National Park Service
NYS DEC – New York State Department of Environmental Control
ODU – Old Dominion University
ORES – Oyster Reef Ecosystem Services
ORP – Oyster Recovery Partnership
OSSE – Office of the State Superintendent of Education
PA – Pennsylvania
PA DEP – Pennsylvania Department of Environmental Protection
PCB – polychlorinated biphenyl
PMP -- Pollution Minimization Plan
PRFC – Potomac River Fisheries Commission
PSC – CBP's Principles' Staff Committee
QA – quality assurance
RFB – Riparian Forest Buffer
RMNs - Regional Monitoring Networks
SAV – Submerged Aquatic Vegetation
SERC - Smithsonian Environmental Research Center
SHWG – Stream Health Work Group
SRBC -- Susquehanna River Basin Commission
STAC – CBP Scientific and Technical Advisory Committee
STAR – CBP Scientific and Technical Assessment Research team
TCW – Toxics Contaminants Workgroup
TEA - Tidewater Ecosystem Assessment Division of MD DNR
TMDL – Total Maximum Daily Load
TNC – The Nature Conservancy
TSCA – Toxic Substance Control Act
UMBC – University of Maryland Baltimore County
UMCES – University of Maryland Center for Environmental Science
UMCES-CBL – University of Maryland Center for Environmental Science-Chesapeake Biological Lab
UMD – University of Maryland
USACE – U.S. Army Corps of Engineers
USDA – U.S. Department of Agriculture
USFWS – U.S. Fish and Wildlife Service
USFS – U.S. Forest Service
USGS – U.S. Geological Survey
UVA – University of Virginia
VA – Virginia
VCU – Virginia Commonwealth University
VA CZM – Virginia Coastal Zone Management
VBOE – Virginia Board of Education

VDGIF – Virginia Department of Game and Inland Fisheries
VIMS – Virginia Institute of Marine Science

Virginia DEQ – Virginia Department of Environmental Quality
VMRC – Virginia Marine Resources Commission
WG – work group
WIP – Watershed Implementation Plan
WQN - Water Quality Network