

All numbers and information included below are imaginary. This document aims to illustrate how a revised CBP Management Strategy could look using a fake Outcome.

Management Strategy for Goal 1: Community Habitats and Wildlife

Goal

Protect, restore and sustain wildlife, as well as the network of land and water habitats they depend on, to promote a balanced and resilient ecosystem.

Situation Analysis for Goal 1: Community Habitats and Wildlife

In the table below, the Community Habitats and Wildlife Goal Team has summarized the most critical challenges facing each of its Outcomes that are within CBP's ability to impact or influence. The Goal Team and its Workgroups, as appropriate, have identified those challenges show in **bold** as critical for workgroups to begin addressing within the next six years via the development and implementation of Management Approaches. Challenges associated with Changing Environmental Conditions are denoted with an asterisk (*).

Challenges	Outcomes					
	1.1 Vernal Ponds	1.2 Salamanders	1.3 Pollinators	1.4 Backyard Birds	1.5 Fields & Pastures	1.6 Woodlands
Habitat conversion, fragmentation and loss	X	X	X	X	X	X
Property owner willingness to adopt practices	X	X	X	X	X	X
Workforce knowledge and capacity for conservation	X	X	X	X	X	X
Herbicide and pesticide use	X	X	X	X	X	
CBP capacity to sustain long-term monitoring	X	X	X	X		
Land use changes and development pressure	X	X			X	X
Mortality associated with the spread of diseases		X	X	X		X
Changing environmental conditions-related decrease in availability suitable habitat*	X	X		X		
Increasing pressure from invasive species			X	X		X
Increasing timber harvest rates		X				X
Fire and fuel management*					X	X
Mortality associated with windows/building glass				X		
Nutrient management					X	

Management Approaches for Goal 1: Community Habitats and Wildlife

Management Approach 1.0.1: Design and conduct a survey to understand barriers to homeowners' willingness to adopt practices and opportunities to reduce those barriers.

All Outcomes within the Community Habitats and Wildlife Goal Team identified property owner willingness to adopt environmental practices as a key challenge to address within the next six years. The Goal Team will create and conduct a survey to determine what factors impact homeowners' willingness to adopt specific environmental practices and what solutions can reduce those barriers. Outcome subject matter experts will identify the specific environmental practices that should be included in the survey. Survey findings will be used to reduce barriers to the adoption of environmental practices, with specific actions identified in Outcome Workplans.

Management Approach 1.0.2: Assess the viability of leveraging Artificial Intelligence and satellite data to expand CBP's capacity for long-term monitoring.

Leveraging technological expertise from signatory partners, universities, NGOs, and workgroup data providers, the Community Habitats and Wildlife Goal Team will stand up a temporary action team to determine if Artificial Intelligence and satellite data can provide a cost-effective means of expanding CBP's for long-term monitoring capacity for tracking progress across multiple outcomes. This action team will collaborate with Outcome leads to define priority monitoring needs, inventory available datasets and computing needs, run pilot studies to benchmark AI models against current monitoring methods, and assess the cost-effectiveness and accuracy of various methods.

Backyard Birds Outcome Sub-Chapter

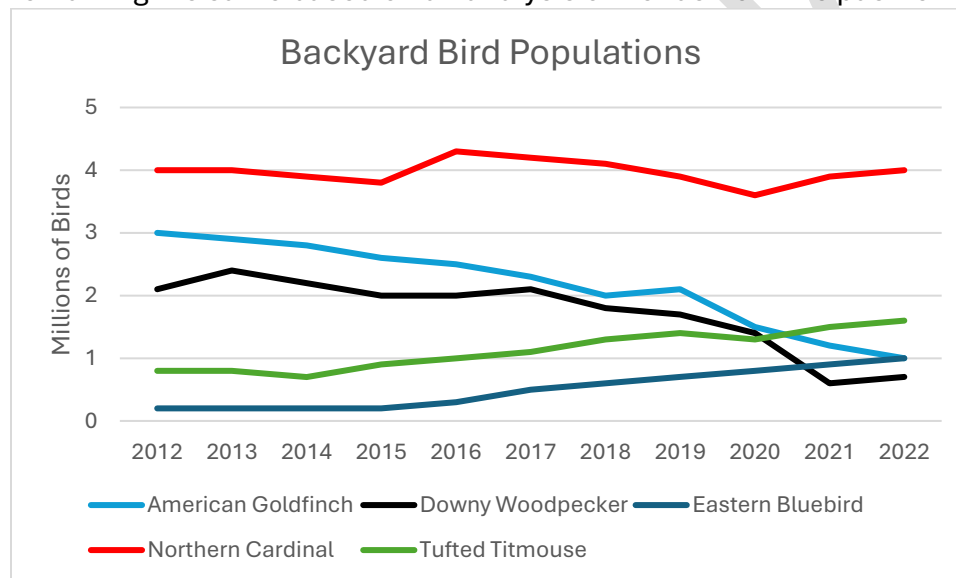
Backyard Birds Outcome: Maintain healthy populations of common backyard bird species across the Chesapeake Bay watershed.

- By 2040, maintain or increase populations of five focal backyard bird species (Northern Cardinal, Eastern Bluebird, American Goldfinch, Downy Woodpecker, and Tufted Titmouse)
- Create 1,000 new acres of bird-friendly habitat on residential and community lands each year.
- By 2040, reduce human-related causes of bird mortality by 15%

Baseline and Current Condition

Backyard bird populations

Estimates of breeding-season adult bird populations in the Chesapeake Bay Watershed are provided below by species based on data collected and analyzed for the [Imaginary Chesapeake Bird Survey](#) [add hyperlink to Chesapeake Progress]. Baselines for each species are derived from the average population size between 2012 and 2022. These baselines will be used to assess progress towards the Backyard Bird Outcome on an annual basis. The current condition of each species is listed as decreasing, increasing or remaining the same based on an analysis of trends from the past ten years.



Note: Hyperlinks below would go to Chesapeake Progress Indicator pages

- [Northern Cardinal](#)
 - Baseline population: 4 million breeding adults
 - 10-year trend: remaining the same
- [Eastern Bluebird](#)
 - Baseline population: 0.5 million breeding adults
 - 10-year trend: increasing
- [American Goldfinch](#)
 - Baseline population: 2.2 million breeding adults

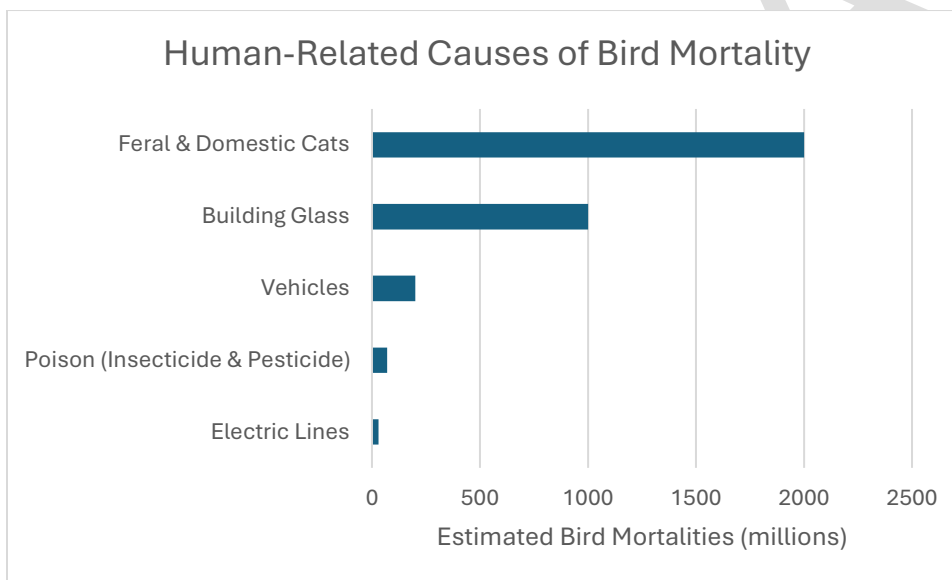
- 10-year trend: decreasing
- [Downy Woodpecker](#)
 - Baseline population: 1.7 million breeding adults
 - 10-year trend: decreasing
- [Tufted Titmouse](#)
 - Baseline population: 1.1 million breeding adults
 - 10-year trend: increasing

Acres of bird-friendly habitat

The creation of new acres of bird-friendly habitat will be assessed from a baseline of 0 acres in 2027.

Human-related causes of bird mortality

The baseline for bird mortality from human-related causes is estimated to be 3.3 billion birds per year. This calculation is based on 2017 Imaginary Chesapeake Bird Mortality data, which uses monitoring and modeling data described in the [Analysis and Methods](#).



Monitoring Progress and Indicators

[Indicator: Chesapeake Bird Survey](#) [hyperlink text to Chesapeake Progress Indicator]

The Chesapeake Bird Survey was established in 2012 to monitor the abundance of common species of breeding adult birds that can frequently be observed in backyard habitats across the region. Data will be collected, analyzed and reported on an annual basis.

[Monitoring: Creation of bird-friendly habitat \(hyperlink to Chesapeake Progress\)](#)

An Indicator will not be used for this Outcome or Target. The creation of new bird-friendly habitats will be assessed by calculating the acreage of restoration projects after installation is completed. Bird-friendly habitat monitored for this effort will meet the

definition and parameters established in the [Backyard Bird Workgroup’s Welcoming Birds to our Shared Spaces document](#). Federal, state, and participating NGO partners will report acreage of bird-friendly habitat created through direct restoration activities and as a result of grant funding to the Workgroup. At the conclusion of each calendar year, the target will be reported as Complete or Incomplete in Bay Barometer.

Indicator: Human-related causes of bird mortality

The Human-Related Causes of Bird Mortality Indicator estimates Chesapeake Bay watershed-wide bird deaths attributable to key anthropogenic sources – electric lines, poisons, vehicles, building glass, and feral and domestic cats – via a hazard-weighted proxy during sampling years (occurring every three years, starting in 2023). It integrates locally parameterized models with regional data (e.g., bird-safe retrofit counts, shelter/TNR records, roadkill and rehabilitation/salvage reports, building inventories and lighting policies, and pesticide sales/use) to report total birds per year and a rate per square mile, normalized to the 2023 baseline year.

Backyard Birds Outcome Situation Analysis

The following table identifies challenges that will impact progress towards attaining the Backyard Birds Outcome and its targets. This analysis considers scientific, environmental, fiscal or policy-related developments that have already or may influence work during the upcoming six-year Management Strategy cycle. Consideration is given to which challenges are within and outside of CBP’s ability to influence. Challenges associated with Changing Environmental Conditions are denoted with an asterisk (*). Challenges listed in bold font have been identified by the Community Habitats and Wildlife Goal Team as being priorities for the Backyard Birds Workgroup to seek to address or make progress against through the development of Workplan projects.

Challenges	Within CBP sphere of influence	Outside of CBP sphere of influence
CBP capacity to sustain long-term monitoring	X	
Cost, supply chain, & availability of materials (native seeds, window decals, native saplings)		X
Household income/ability to pay for bird-friendly projects		X
Property owner willingness to adopt practices	X	
Workforce knowledge and capacity for conservation – window retrofits and native landscaping for wildlife	X	
Homeowner attitudes toward native landscaping	X	

Public awareness of bird-window collisions and solutions	X	
Potential for AI bird identification with birdfeeder cameras	X	
Emerging use of remote sensing for bird abundance est.	X	
Partnership development of social networks for birding	X	
Mortality associated with windows/building glass	X	
Mortality associated with the spread of diseases	X	
Mortality from feral and domestic cats	X	
Increasing pressure from invasive species	X	
Herbicide and pesticide use rates	X	
Habitat fragmentation and loss	X	
Disrupted phenology* - changes to seasonal timing (Ex: flowers blooming earlier/changes to food availability)		X
Increased drought and changes in rainfall patterns*		X
Changing environmental conditions-related decrease in availability suitable habitat*	X	
Federal & state regulations on bird-safe designs	X	
Building codes and permit for bird-friendly window retrofits		X
Homeowners Association property & home regulations		X
Data-sharing agreements and privacy-compliant legal frameworks for social science data collection		X

Snapshot of Signatory Programs

Managing a large and difficult restoration and conservation program with “no assurance about the level of funds that may be available beyond the short term” (GAO, 2028) is a challenging undertaking that requires individual and collaborative action from signatory partners, as well as the many communities and individuals who live, work, play and learn in our region. This “Snapshot of Signatory Resources” seeks to better recognize the significant contribution that individual signatory partners and federal agencies make towards outcome attainment. The existing programs and funding spotlighted below are not intended to represent the full range of resources available or required to support progress towards outcome attainment; only the “biggest ticket” programs are included for each outcome and signatory partner. It is important to note that funding is reported from a single point in time (fiscal year 2025) and is not representative of future investments. Identifying the most critical programs and resources that exist at a particular moment in time can help the partnership focus its collaborative efforts on activities that have the greatest impact, and which don’t duplicate the work of existing programs.

Commonwealth of Neverland

- [Indoor Cats Program](#) (\$100K in FY 25) helps owners transition roaming cats to safe indoor lives through lending libraries and quick-build catio pop-up events.

Commonwealth of Oz

- [Cats Safe at Home Program](#) (\$160K in FY 25) partners with veterinarians, shelters, and neighborhood groups to education, spay/neuter vouchers and a voluntary pledge that helps owners keep cats indoors, while protecting backyard birds.
- [Feathered Neighbors Grant Program](#) (\$400K) supports community efforts to turn lawns, balconies and shared green spaces into connected bird habitat through easements, native plant vouchers and seed- and fruit-rich garden templates.

State of Narnia

- [Keeping Cats Indoor Program](#) (\$180K in FY 25) helps families shift to indoor-only cats, protecting pets and local birds alike through how-to workshops, enrichment starter kits and DIY catio plans.
- [Songbird Sanctuaries Program](#) (\$300K in FY 25) protects and restores shrubland, forests, and meadows across public and residential lands, creating connected corridors and engaging communities in stewardship and songbird monitoring.
- [Building for Birds](#) (\$190K in FY 25) offers a tax credit to Narnia small businesses and community organizations for the installation of treated windows or the retrofit of permanent decals on existing windows to reduce bird collisions.

State of the Shire

- [BirdYard](#) (\$100K in FY 25) helps residents turn lawns into thriving bird habitat by offering free workshops to share lists of nurseries carrying native plants and simple maintenance guides and through “seed grants” to help residents start gardens.
- [Buffers for Birds Mini Grants](#) (\$150K) is a cost-share program that helps the landowners install and maintain native vegetated buffers adjacent to working lands to create connected bird habitat while improving water quality and reducing erosion.

U.S. Ministry of Magic

- [Backyard Bird Blocks](#) (\$100K in FY 25) helps developed neighbors convert concrete into connected native plant corridors with water sources and nest sites through the provision of bird houses and information about drought resistant native plants.
- [Native Plants for Bird Habitats in the Chesapeake Bay Watershed](#) (\$500K in FY 25) accelerates installation and maintenance of native trees, shrubs, and wildflowers on school and community lands to create high-quality bird habitats.

Wonderland National Birding Service

- [Songbird Conservation Grant Program](#) (\$100K in FY 25) through technical assistance and partnerships with local governments this program reduces pesticide reliance, expands native-plant supply, and promotes birdwatching.

Management Approaches

Management Approach 1.4.1. Identify barriers and increase homeowner willingness to install habitats for backyard birds and pollinators

The availability of habitats that support healthy populations of backyard birds have decreased over the past decades. Practices installed on residential properties can create critical corridors and suitable habitats to support migratory and non-migratory species.

The Backyard Birds Workgroup will contribute expertise to support the Goal Team's survey of factors that impact homeowners' willingness to install practices and opportunities to reduce those barriers. Using survey results, the workgroup will develop programs and materials that seek to address top barriers to bird-friendly habitat installation.

Management Approach 1.4.2: Decrease window collisions as a source of bird mortality

Bird collisions with building windows result in an estimated 1 billion bird deaths each year. Policy alignment, technical assistance to local governments, and capacity building efforts to expand workforce knowledge, skills and abilities can help communities and homeowners install or retrofit bird-safe window treatments that reduce bird mortality.

Management Approach 1.4.3: Engage citizen scientists in monitoring backyard bird populations and communicate results to participants and stakeholders

Citizen science can expand the availability of data on backyard birds to build capacity for long-term monitoring efforts. Engaging residents as co-researchers can also build skills that translate into sustained public support and volunteer capacity for bird conservation. This Approach trains volunteers across the watershed to run standardized yard counts, feeder surveys, and window-collision logs using simple protocols and mobile tools, supported by microgrants and partnerships with schools, libraries, and community groups. Biologists will share results of citizen scientist monitoring and Indicator trends with citizen scientists and interested stakeholders through annual Backyard Birds reports, press releases, webinars and social media campaigns.

Management Approach 1.4.4: Share best practices to improve existing indoor cat programs and help reduce prey-related backyard bird mortality.

Many jurisdictions in the Chesapeake Bay Watershed have existing programs that seek to reduce bird mortality associated with cat predation. These programs promote indoor only cat ownership through behavior change campaigns, catio guides, shelter/veterinary partnerships and other methods. This approach convenes program managers to spotlight and discuss best practices from existing indoor cat programs, enabling the improvement of similar programs. Best practices will be packaged into a shared toolkit with model outreach materials, behavior-change messages, and HOA/municipal templates.

Management Approach 1.4.5: Support the adoption of habitat modifications that mitigate invasive species impacts and support native species

Reduce pressure from non-native species like House Sparrows and European Starlings by reshaping resources and nest opportunities in favor of native birds can help improve native species populations trends. Partners will promote the use of feeder types and foods that exclude invasive species and deploy nest boxes with species-specific entrance plates and active monitoring to prevent takeover. Efforts will also align policies and regulations.

Management Approach 1.4.6: Conduct research to address knowledge gaps about the impact of changing environmental conditions, land use changes/habitat availability and disease on backyard bird population dynamics. Use results to refine management efforts

The Backyard Birds Workgroup has committed to prioritizing and conducting research that examines relationships between, and primary drivers of, the abundance of common backyard bird species and other important aspects of population dynamics. This includes understanding the influence of changing seasonal availability of food on backyard bird survival and chick mortality, disease and the population-level effects of the loss of key habitats. Findings of scientific research into ecological and environmental factors that affect backyard bird population dynamics will be used to improve the effectiveness of management efforts to sustain healthy populations of common backyard bird species.

Participating Partners

The following partners participated in the creation of this Management Strategy and expressed their intention to collaborate on Management Strategy implementation over the next six years. Per the Chesapeake Bay Watershed Agreement, “participation in developing Management Strategies or in the achievement of Outcomes varies by signatory based on differing priorities across the watershed. This participation may include commitments such as sharing knowledge, data or information, educating the public, working on future legislation and developing or implementing programs or verified practices” (2025). Signatory partners may join implementation efforts at any time. Partners also recognize that Signatory participation is voluntary and may vary accordingly.

- **Signatory Partners**
 - Commonwealth of Neverland
 - Commonwealth of Oz
 - State of Camelot
 - State of Narnia
 - State of the Shire
 - State of the Zootopia
 - U.S. Ministry of Magic
 - Wonderland National Birding Service
 - **At Large Members of the Backyard Birds Workgroup**
 - University of Zootopia
 - Mid-Atlantic Birders
 - the Chesapeake Birding Society
 - Tumnus Foundation
 - Lollipop Guild Birders
 - Chesapeake Conservators
 - Old Forest Nurseries
 - Hobbiton
 - Emerald City Planning and Zoning Department
 - District 12
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Appendix 1. Signatory Statutory Authorities Driving Outcome Attainment

The law and regulation of signatory partners may support, justify or motivate their participation in the collaborative work of the Chesapeake Bay Program related to the attainment of specific Outcomes and Targets of the Watershed Agreement.

The following documentation identifies core statutory authorities that provide part of the impetus for the attainment of Chesapeake Bay Watershed Agreement Outcomes and their related Targets. While Chesapeake Bay Program partners acknowledge that the Chesapeake Bay Watershed Agreement is voluntary, subject to the availability of appropriated funds, and does not preempt, supersede or override any other law or regulation applicable to each signatory, they also acknowledge that the law or regulation of individual signatories can support each partner’s participation in outcome attainment. The table below is not an exhaustive list of all relevant laws and regulations. Rather, this appendix identifies the main driving motivators that can bring about signatory partner engagement in efforts described in in this Strategic Plan, associated Management Strategies, and the Workplan.

Goal 1: Community Habitats and Wildlife

Outcome: Backyard Birds	
Signatory	Statutory Authority (Note: include hyperlinks)
Commonwealth of Neverland	4 Neverland Administrative Code (NAC)-400-120-Bird-Friendly Building Features
	4NAC-123-456-Neighborhood Habitat Corridors
Commonwealth of Oz	58 OZ Code § 147.815 Community Bird Habitat Program
	58 OZ Code § 137.55 Feeder Disease Prevention
State of Camelot	7 CAM Admin. Code 3900-13.0 Bird-Friendly Community Greenspaces
	7 CAM Admin. Code 3900-14.0 Residential Bird Collision Reduction
State of Narnia	Code of Narnia Regulation (CONAR) 05.02.20.05 Residential Bird-Safe Construction
	CONAR 08.03.20.01 Backyard Birds
	CONAR 08.03.21.15 Songbird Sanctuaries
State of the Shire	Shire (Sh.) Code R. § 58-66-3 Backyard Bird Conservation Grants
	Sh. Code R. § 58-67-2 Migration-Friendly Electric Lines
State of the Zootopia	6 Zootopia Codes, Rules and Regulations (ZCRR) Part 196 Songbird Sanctuaries
	6 ZCRR Part 197 Bird-Friendly Building Design
U.S. Ministry of Magic	Backyard Birds Act § 404, 33 MOMC § 1399

Wonderland National Birding Service	Bird Conservation and Restoration Act, 54 MOMC § 100101
	Northern Cardinal Preservation Exec. Order No. 13,676, 3 C.F.R. 294 (2010)

Workplan (separate document)

The Workplan will exist as a separate document outside of the Strategic Plan and Management Strategies. Workplans will describe the projects that will be pursued by the partnership over the next three years (between July 2027 – June 2030).