

Resident Waterfowl Damage Management Plan

Spring Creek Association (SCA)

Agency Managers / Responsible Persons

- **Spring Creek Association (SCA) Board of Directors** — Policy adoption, budgeting, oversight, and acceptance of annual reports.
- **SCA General Manager & Staff** — Day-to-day implementation, contractor management, egg oiling/nesting activities, signage/closures, community liaison, data collection, and reporting.
- **USDA APHIS Wildlife Services (WS), Nevada** — Technical lead for field operations (e.g., hazing strategies, permitted capture), coordination with agencies, and professional Standard Operating Procedures (SOPs).
- **U.S. Fish & Wildlife Service (USFWS)** — Migratory Bird Treaty Act (MBTA) permitting for egg oiling/nest destruction, capture, and any removal actions; NEPA compliance framework.
- **Nevada Department of Wildlife (NDOW)** — State permitting/authorization, veterinary guidance (e.g., Alpha-chloralose prescribing vet), surveillance coordination for Highly Pathogenic Avian Influenza (HPAI), and technical review.
- **Elko County / Local Law Enforcement** — Support for temporary closures and public safety as needed.

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1.0 – Introduction

Resident Canada goose populations have grown throughout the United States, a pattern also observed in Northern Nevada. Spring Creek Marina's lush turf, open water, gentle banks, and limited predation create an ideal environment for year-round residency, sometimes attracting human feeding. As Nevada is an arid state with limited water resources, any open body of water is a major attractant to waterfowl. This document aims to balance wildlife values with the need to maintain public health, safety, and recreational access for all residents.

This plan is an integrated, science-based program specifically designed for the Spring Creek Association (SCA). It incorporates federal and state permitting, agency coordination, public health safeguards, and a progressive set of methods that prioritize prevention and escalate only when necessary.

2.0 – Canada Goose Biology and Regulation (Nevada)

2.1 – Local Canada Goose Information (Spring Creek Marina)

Spring Creek Marina offers attractive loafing, grazing, and nesting conditions for Canada geese. Their peak presence coincides with nesting, brood-rearing, and molting periods, when droppings rapidly accumulate on lawns, paths, docks, and beaches. Waterfowl show strong site fidelity, or a tendency to return to the same safe, food-rich locations year after year.

2.2 – Regulation / Agency Roles (USDA WS • USFWS • NDOW • NEPA)

The USFWS administers the Migratory Bird Treaty Act (MBTA) and issues permits for nest/egg management, capture, and any removal actions. NDOW provides state-level authorization and veterinary/technical guidance. The USDA Wildlife Services (Nevada) acts as the technical and operational lead for specialized field work, including permitted capture and removal programs. All actions are conducted within the guidelines and framework established for resident Canada goose management.

3.0 – Waterfowl Benefits and Conflicts

3.1 – Benefits of Waterfowl

Waterfowl offer wildlife viewing and educational value, contributing to the marina's sense of place. The goal of SCA's program is coexistence at sustainable levels, not the elimination of geese.

3.2 – Specific Conflicts at Spring Creek Marina

- **Public health risks:** Elevated fecal bacteria (e.g., *E. coli*) and pathogens in near-shore waters; an increased risk of swimmer's itch, also known as 'duck mites,' due to high waterfowl density. Duck mites are tiny parasites that live in water and are linked to ducks and snails. They need ducks to complete their life cycle, and they often use snails as an in-between host. When people swim, wade, or play in water where duck mites are present, the mites can mistake humans for their host and bite the skin. While they cannot live on people, the bites cause itchy red welts and discomfort, sometimes called “swimmer’s itch.” Because duck mites can be a nuisance and a health hazard in lakes, ponds, and other recreational waters, it’s important to take steps to keep their numbers as low as possible.
- **Aesthetic and access impacts:** Droppings on beaches, grass, docks, and walkways create slippery surfaces and lead to user complaints; shoreline nutrient loading from feces can harm water quality.
- **Aggressive behavior:** Geese can exhibit aggressive behavior during nesting season. Additionally, flock crossings on roadways create traffic hazards.
- **Rising maintenance costs:** Cleanup, turf repair, and shoreline protection costs have increased due to the waterfowl population.
- **Avian Influenza Risk:** Waterfowl can act as reservoirs and vectors for Highly Pathogenic Avian Influenza (HPAI). The virus can spread to other species, including domestic animals and, in some cases, humans. Monitoring and managing the goose population density helps reduce the risk of transmission. SCA has had the HPAI infect the geese at the Marina and is a concern we have to consistently look for.

4.0 – General Canada Goose Damage Control Options

4.1 – Non-Lethal Control Techniques (based on staffing and funding)

- **Habitat modification:** Altering the environment to make it less appealing to geese. This includes using native shoreline buffers that are at least 3-5 feet tall, maintaining taller turf or "no-mow" strips, and re-grading or rocking banks. Installing seasonal low fencing can control gosling access, while adjusting irrigation and fertilizer can make the grass less palatable.
- **Repellents:** Applying EPA-registered grape-extract repellents to priority lawns. These must be reapplied as directed on the label after mowing or rain. The high cost of this method will be a factor in its evaluation.
- **Operational sanitation:** Increasing the frequency of sweeping or vacuuming droppings in high-use areas and ensuring proper trash disposal to remove human-provided food sources.
- **Harassment:** This can include a variety of methods to deter geese without harming them.
 - **Professional goose-dog patrols** on a varied schedule (with a pause during the molt period).
 - **Volunteer hazing programs** with training, using tools like air horns, whistles, and umbrella deterrents.
 - **Multi-sensory deterrents:** Using distress-call emitters, timed propane cannons, mylar tape, balloons, and laser deterrents at dawn and dusk.
 - **RC devices** like the Goosinator, boats, or cars to haze flocks on demand.
 - **FAA-compliant drone hazing** operated by trained professionals.
 - **Advanced AI deterrent systems** that use cameras to detect waterfowl and unpredictably activate sprinklers, speakers, or lights.
 - **Bubblers or water agitators** to make the shoreline less appealing for loafing or resting.

4.2 – Goose Capture / Physical Control Methods

- **Egg oiling/addling:** This is a technique performed under permit to prevent eggs from hatching. It involves coating eggs or using addling protocols.

- **Molt season round-ups:** During their flightless molt period, geese can be captured using funnel or drive traps or other methods suggested by State and Federal agencies within their allowance.

5.0 – Past SCA Goose Management Efforts

Since 2017, SCA has addressed waterfowl issues in public meetings and seasonal operations. Past efforts include enacting anti-feeding rules, posting signage, implementing seasonal closures, coordinating egg oiling, and exploring professional support. This plan consolidates and formalizes these actions into a continuous program with clear metrics and reporting.

6.0 – Site Descriptions and Survey Data / Analysis (SCA)

6.1 – Site Descriptions

The Spring Creek Marina area includes shoreline parkland, beaches, docks, lawns, and adjacent roads and parking lots. High-use nodes for both people and geese are swimming areas, picnic lawns, and launch/dock zones. Waterfowl tend to concentrate where lawns meet the water and sightlines are open.

6.2 – Observational, Transect, Survey and Anecdotal Data (Methods)

- **Point counts and flock scans:** Regular counts of the goose population.
- **Water/fecal testing:** Sampling to monitor bacteria and pathogen levels.

7.0 – Goose Control Objectives for SCA

The primary purpose is to manage the population of resident waterfowl at Spring Creek Marina to minimize conflicts and maximize recreational enjoyment. SCA will identify 'core resident' birds and prioritize management efforts to reduce the conflicts associated with these persistent groups.

Key Objectives:

- Reduce the number of duck mites and other parasites in the water.
- Minimize fecal contamination along shorelines and in the water.
- Lower the chance of waterfowl carrying avian flu around the marina that could potentially harm other animals.

- Reduce the amount of bird feces in public areas such as playgrounds, beaches, and walking paths.
- Manage the population of resident waterfowl at Spring Creek Marina to minimize conflicts and maximize recreational enjoyment.
- Identify "core resident" birds and prioritize management efforts to reduce conflicts associated with these persistent groups.
- Reduce the density of droppings on designated lawns and paths to meet specific maintenance targets and decrease sanitation labor hours.
- Avoid beach advisories or closures caused by fecal contamination.
- Reduce the number of reports of aggressive encounters and roadway hazard incidents.
- Achieve a year-over-year reduction in the resident flock size, as indicated by surveys and nest productivity.

8.0 – Specific Goose Management Plan-of-Action for SCA

8.1 – Habitat Management at Spring Creek Marina

- Reduce the area of shoreline lawn and convert sections into native meadows or tall grasses.
- Install or maintain shoreline native buffers and boulder clusters to block sightlines and access for geese.
- Rotate floating predator decoys (coyote/kites) to maintain their effectiveness.

8.2 – Non-Lethal Goose Management Techniques (Hazing & Deterrents)

This section outlines the active, non-harmful methods used to deter geese from problem areas.

- **Professional Hazing Services:** Employing professional services with trained dogs and handlers to consistently and unpredictably move geese off high-priority areas. This is a highly effective, non-lethal method.
- **RC & Automated Systems:** Using remote-controlled devices like boats, cars, or drones to harass and move geese on demand. This provides a way to respond quickly to new arrivals.

- **Multi-Sensory Deterrents:** Deploying a combination of deterrents to prevent habituation. This includes using speakers with distress calls, strobe lights, or laser pointers during low-light conditions. These methods are most effective when used unpredictably.
 - **Physical Barriers:** Installing temporary fencing or monofilament lines to restrict access to specific areas during key periods, such as nesting season.
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8.3 – Reproduction Control (Egg/Nest Management)

- **Systematic nest searches:** Conduct regular searches to locate goose nests.
- **Egg oiling:** Apply 100% oil to eggs to prevent them from hatching.
- **Addling protocols:** Both oiling and addling are performed under USFWS/NDOW permits.
- **Annual reporting:** A summary of nest outcomes will be tracked and reported annually for permits and to inform adaptive management decisions.

8.4 – Capture and Removal of Canada Waterfowl Under Permit

- Molt round-ups, and capture activities will be conducted under authorization from USFWS and NDOW under permits acquired.
- **No public hunting or firearm discharge** is permitted at the Marina due to the proximity to homes and public spaces.
- **Donation of carcasses for food is not feasible** due to insurance and liability constraints.

8.5 – Monitoring and Cost-Benefit Analysis

- Track sanitation and repair costs and compare them to the costs of prevention, habitat management, and hazing programs to demonstrate the return on investment (ROI).
- Maintain annual report for agencies to review program performance.

9.0 – Public Health & Safety

E. coli, Avian Influenza, Swimmer's Itch/Duck Mites

This section outlines the measures taken to protect the health and safety of the community.

- **Water Quality Monitoring:** Conduct seasonal water and fecal testing at designated swim and shoreline nodes.
- **Highly Pathogenic Avian Influenza (HPAI):** Waterfowl can carry the HPAI virus without showing symptoms, and the virus can be transmitted through feces. A high concentration of geese increases the risk of transmission to other wildlife and domestic animals, and in rare instances, to humans.
 - SCA will coordinate with NDOW/USDA for surveillance when sick or dead waterfowl are reported.
 - Population density management is a key tool in reducing the risk of HPAI transmission.
- **Swimmer's Itch/'Duck Mite' Risk:** Manage this risk through population control and thoughtful shoreline design. Public education will be provided on how to avoid shallow, snail-rich areas during high-risk periods.
- **Routine Sanitation:** Implement routine cleaning and closures as needed to protect families and pets from droppings.

10.0 – Alpha-Chloralose Program

Alpha-chloralose (A-C) is a sedative used by USDA Wildlife Services under a veterinary prescription and state/federal authorization. It is used to sedate and live-capture specific avian species, not as a poison. The bait is precision-dosed and administered under constant supervision on-site until the birds are safely recovered. Temporary area controls and signage are used to keep people and pets out of the work zone during operations.

11.0 – Community Education, No-Feeding, and Enforcement

Effective waterfowl management requires active community participation and understanding.

- **No-Feeding Ordinance:** Post highly visible signage at all entrances and key nodes to inform the public.
- **Public Outreach:** Use HOA channels to educate residents.
- **Volunteer Program:** Encourage a volunteer program with training and recognition for community members who assist with lawful hazing and reporting of nests. This fosters a sense of shared responsibility and collaboration.

12.0 – Implementation Timeline (Annual Calendar)

- **Winter (Oct–Feb):** Renew permits, get budget approval, finalize contracts, plan vegetation projects, and recruit/train volunteers.
- **Spring (Mar–May):** Conduct nest searches and egg oiling/addling under permit, install/refresh buffers, begin goose-dog/volunteer hazing, apply repellents, start the survey/monitoring schedule, and initiate water/fecal testing.
- **Summer (Jun–Aug):** Continue hazing, conduct molt round-ups if thresholds are exceeded, use drone/RC support as needed, continue testing, maintain sanitation, and post updates for the community.
- **Fall (Sep–Nov):** Evaluate program outcomes, make adjustments to habitat (e.g., plantings, boulders, irrigation), plan for bubbler/agitator installations if needed, publish an annual report, and renew permits.

13.0 – Risk Management, Liability, and Insurance Considerations

Public hunting and firearm discharge are not permitted due to the proximity of the Marina to residential areas and public spaces. The donation of carcasses for human consumption is also not an insurable activity for an HOA due to food-safety liability concerns.

14.0 – Reporting, Transparency, and Adaptive Review

SCA will publish a yearly update summarizing the information. In compliance with Nevada Open Meeting Law, these updates will be presented at public meetings. The plan will be reviewed and adjusted as needed to ensure effectiveness and continuous improvement.

Frequently Asked Questions (FAQ)

- **Are you spreading poison?** No. There is no registered toxicant for waterfowl. Alpha-chloralose is a sedative used in controlled, permitted operations by USDA WS. No general poison is scattered.
- **Why not just relocate them?** Relocated geese have high return rates and can transmit disease. For these reasons, agencies severely limit relocation or not at all.
- **Why not allow hunting or donate birds?** It is unsafe and illegal near residences and public spaces. Donation presents an unacceptable food-safety liability for an HOA.
- **Isn't this anti-wildlife?** The goal is healthy coexistence using prevention first, followed by humane, permitted tools only as needed.

References

- Bend Metro Park & Recreation District. Canada Goose Management Plan (Draft, Dec 2009; ToC 2010).
- USFWS Resident Canada Goose Management FEIS and subsequent rules/permits (MBTA).
- USDA APHIS Wildlife Services (Nevada) technical SOPs and correspondence with SCA.
- Nevada Department of Wildlife (NDOW) guidance, veterinary advisories, and permitting notes.
- Spring Creek Association Board minutes (2017–2024) referencing waterfowl management actions and permits.
- Public health guidance (E. coli, swimmer's itch/cercarial dermatitis; avian influenza surveillance).
- Product labels and guidance for EPA-registered grape-extract repellents.



