## **S452 BMPs for Goose Waste**

**Description of Pollutant Sources:** Goose waste deposited near water or in water can contribute nutrients and algae growth. Goose feces may contain pathogens and contribute to the spread of diseases. Swimmers itch (schistosome or cercarial dermatitis) is caused by a parasite that can be spread by goose droppings, but does not mature or reproduce in humans.

**Pollutant Control Approach:** To help decrease geese pollution to water sources, remove waste periodically and use deterrent management practices.

## **Applicable Operational BMPs:**

This BMP is for areas of chronic accumulation of goose waste that impact stormwater systems.

- If possible, pick up goose waste using shovels, brooms, rakes, power sweepers, and trash cans. Properly
  dispose of goose waste in the garbage.
- Do not blow, sweep, or wash goose waste into waterways or storm sewer systems.
- Regularly clean goose waste from areas of chronic deposition where deterrence measures are impractical.
- Do not feed wild geese or any other wild animals.
- In recreational areas post signs discouraging the feeding of geese and other wild animals.

## **Optional Operational BMPs:**

- Change the habitat from goose friendly to goose resistant. Reduce lawn areas and increase the height of shoreline vegetation (tall grass, shrubs); as geese are reluctant to walk through tall vegetation.
- Create a natural geese barrier. 20 to 100 feet of herbaceous vegetation at least 3 feet in height to
  discourage geese. A narrow, winding path through the plantings will allow for beach access, while
  preventing geese from having a direct line of sight through the planted area.
- Make bank slopes steeper than 4:1 to discourage geese by preventing a clear view of the bank top and
  potential predators. Or, separate the beach from the grass with a few steep steps, which makes the ascent
  too difficult for most geese.
- Narrow ponds to limit takeoff and landing opportunities .
- Where space is limited use one or two rows of shrub plantings combined with a fence. Fences can be made
  from woven wire, poultry netting, plastic netting, plastic snow fencing, monofilament line, or electrified wire.
   Fences should be at least 24 inches tall (3 feet may be better), firmly constructed, and installed to prevent

the geese from walking around the ends. Lower openings should be no larger than 4 inches from the ground to prevent goslings from walking under or through the fence.

- Construct a grid of wire or line above the water's surface to prevent geese from flying into a pond that they
  have been accustomed to using. The grid should be one to two feet above the water surface, but may be
  taller if humans need access to the area under the grid. There should be no more than five feet of space
  between grid lines. To prevent geese from walking under the grid install a perimeter fence. Regularly
  monitor the grid for holes, trapped wildlife, and sagging.
- Canada geese are protected under federal and state law and a hunting license and open season are required to hunt them. Where lethal control of Canada geese is necessary outside of hunting seasons, it should be carried out only after the above nonlethal control techniques have proven unsuccessful and only under permits issued by the U.S. Fish and Wildlife Service. Currently, the only agency permitted for lethal removal is the U.S. Department of Agriculture's Wildlife Services. Lethal control techniques include legal hunting, shooting out of season by permit, egg destruction by permit, and euthanasia of adults by government officials.
- Scare geese away when they are around. Geese often learn quickly to ignore scare devices that are not a
  real physical danger. Vary the use, timing, and location of tactics. Take advantage of geese being fearful of
  new objects. Examples of harassment and scare tactics:
  - Dog patrols: When directed by a handler, dogs are the method of choice for large open areas. Results are often immediate. After an aggressive initial use (several times a day for one or two weeks), geese get tired of being harassed and will use adjacent areas instead. A dog can be tethered to a long lead (which may require relocating the dog and tether frequently to cover more area), be allowed to chase and retrieve a decoy thrown over a large flock of geese, or be periodically released to chase the birds (if this is not against leash laws).
  - **Eyespot Balloons:** Large, helium-filled balloons with large eye-like images. Tether balloons on a 20 to 40 foot monofilament line attached to a stake or heavy object. Locate balloons where they will not tangle with trees or utility lines.
  - Flags and Streamers: Simple flags from plastic mounted on tall poles or mylar tape to make 6-foot streamers attached to the top of 8 foot long poles. Flags and streamers work best in areas where there is steady wind.
  - Scarecrows: Effective in areas where geese view humans as dangerous predators. For maximum
    effect, the arms and legs should move in the wind, use bright colors, and large eyes. Large, blow-up
    toy snakes are reported to work as a type of scarecrow.
  - Noisemakers: Devices that make a loud bang such as propane cannons, blanks, and whistle bombs
    can scare geese. Making the noise as soon as geese arrive and persistence are the keys to success
    when using these devices. Consult noise ordinances and other permitting authorities (such as the
    local police department) before using.
  - Lasers: Relatively low-power, long-wavelength lasers provide an effective means of dispersing geese under low light conditions. The birds view the light as a physical object or predator coming toward

them and generally fly away to escape. Never aim lasers in the direction of people, roads, or aircraft.

- Geese's favorite food is new shoots of grass. Low lying grass also allows easy access to the water for
  protection from predators. Let grass grow to six inches or taller. Stop fertilizing and watering the lawn to
  reduce the palatability of the lawn.
- Minimize open sight lines for geese to less than 30 feet.
- Plant shrubs or trees along ponds to limit takeoff and landing opportunities.

Refer to: <a href="http://www.humanesociety.org/assets/pdfs/wild\_neighbors/canada\_goose\_guide.pdf">http://www.humanesociety.org/assets/pdfs/wild\_neighbors/canada\_goose\_guide.pdf</a> and <a href="https://wdfw.wa.gov/species-habitats/species/branta-canadensis">https://wdfw.wa.gov/species-habitats/species/branta-canadensis</a> for additional information.

## **Washington State Department of Ecology**

2019 Stormwater Management Manual for Western Washington (2019 SWMMWW)

Publication No.19-10-021