



Ethan Berkowitz, Mayor

2015 Stormwater Outreach Public Education and Involvement APDES Permit No. AKS-052558

MUNICIPALITY OF ANCHORAGE
WATERSHED MANAGEMENT PROGRAM

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Prepared for: Municipality of Anchorage
Watershed Management Services

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Report on Outreach and Education for APDES Permit AKS-05258, 2/1/15 to 2/1/16
By Anchorage Waterways Council

During the past year, Anchorage Waterways Council (AWC) has continued many of its traditional methods of outreach and education on stormwater runoff, but there has also been a shift to be more in tune with “social media”, i.e. Facebook and e-newsletters, as that is how many people are currently receiving much of their information. AWC continues face-to-face interactions and written surveys (for entrance into a drawing for gift cards) at tabling events in order to answer questions, gauge interest, and assess levels of knowledge and *assumed* compliance with issues such as picking up pet waste, disposing of green waste properly, using yard chemicals, and not allowing anything except clean water to run down a storm drain.

Following is a list of tabling and other events that AWC organized or participated in this past year.

- **Tabling Events:**

- Scoop the Poop
 - Pet New Year, Alaska Mill and Feed, 2/7/15
 - Pawstice, Ruth Arcand Park, 6/28/15
 - Bark in the Park/Canine Frisbee Championship, Delaney Park Strip, 7/12/15
 - Dog Jog (Friends of Pets), Service High, 7/25/15
 - Alaska Ace’s “Pets are People Too” Pet Fair, Sullivan Arena, 12/4/15 & 12/5/15
- Gardening
 - Sears Annual Spring Garden Show, Sears Mall, 4/4/15
- Monofilament Recycling Education
 - Migratory Bird Day, Alaska Zoo, 5/17/15
 - Gone with the Wing, Potter Marsh, 8/22/15
- General—history and future of Anchorage’s creeks
 - Future Tense, Anchorage Museum, 11/13/15

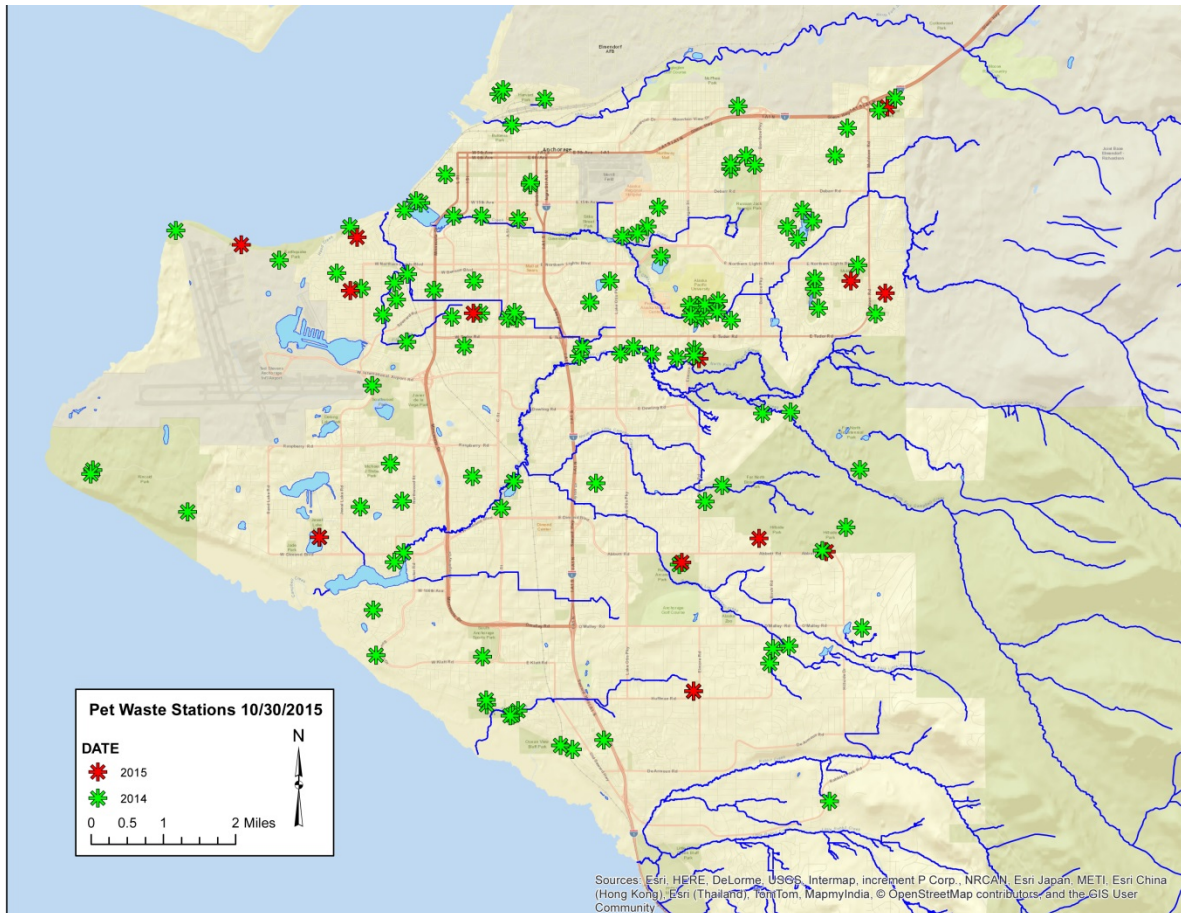
- **Events:**

- Scoop the Poop Day, Connors Bog & University Lake, 4/18/15
- AWC 31st Annual Creek Cleanup, 5/9/15 to 5/16/15
- Day of Caring (a program of United Way), Alyeska Pipeline Service & BP staff, 9/9/15
- Anchorage Waterways Council Annual Meeting, “Invasives in Alaska: Are Herbicides the Answer?”, 10/25/15

AWC also focused on pet waste as well as high fecal coliform levels that have resulted from humans feeding waterfowl most noticeably at Cuddy Family Midtown Park. The park has a large ponded area that is a daylighted section of Fish Creek, which is on the Alaska impaired waters list for fecal coliform. With an ACWA (Alaska Clean Water Act) grant from the Alaska Department of Environmental Conservation (ADEC) for July 1, 2015 to June 30, 2016, AWC staff organized three informational “walks” around the pond during August and September, then held a stakeholder’s meeting on September 28, 2015, which had over 30 local and agency people in attendance. It was a good meeting to share information regarding the issues of degraded water quality as well as other problems, such as potential bird/aircraft impacts, aggressive birds, feces covered walks, bank erosion, and some negative health impacts on the waterfowl from being fed human food. Currently, AWC is working with ADEC, the

Municipality, and other state agencies to develop an education campaign (signage, brochures, and media reporting) to inform people about the negative impacts of feeding migratory waterfowl. Several TV and newspaper media stories were done in 2014, and as soon as the new program is up there will be more.

Another aspect of the ADEC ACWA grant was funding to add 8 new Mutt Mitt pet waste stations to local parks and trails. With the 11 that were added in 2014 from an earlier ADEC grant, there are now over 100 pet waste stations available to pet owners. The following map shows all the stations that had been mapped and added through 2014 (green) and then the new ones that were installed in 2015 (red).



AWC has received figures from the Municipality’s Parks and Recreation Department who supply almost all of the purchased Mutt Mitt bags (personal communication, Ted Johnson, 2/4/16).

Year	# of pet waste bags purchased
2015	312,000
2014	264,000*/344,000
2013	312,000
2012	264,000
2011	240,000

*ADEC grant to AWC purchased an additional 80,000 bags for a total of 344,000

AWC has also placed an interactive map of Mutt Mitt pet waste stations on its website at anchoragecreeks.org/pages/scoopthepoop_about.php. In addition to the official pet waste stations, 4 experimental PVC tubes where people can recycle their grocery bags have been added to two popular dog parks, Connors Bog and University Lake. Besides the benefit of providing extra bags when the pet waste stations become empty, the recycled grocery bags are less likely to fly around (typically they are hung on fences in bags) and contribute to plastic litter. KTVA did a news story on this which can be found at <http://www.ktva.com/scoop-the-poop-makes-pet-clean-up-around-anchorage-easy-858/>.



Connors Bog—New PVC Bag Holder

Keep Your Park Clean
Please use these bags to pick up your pet's waste, because it is unhealthy for waterways and humans.



You can also help us provide bags by recycling yours here.

This dispenser was provided by:
Anchorage Waterways Council



anchoragecreeks.org

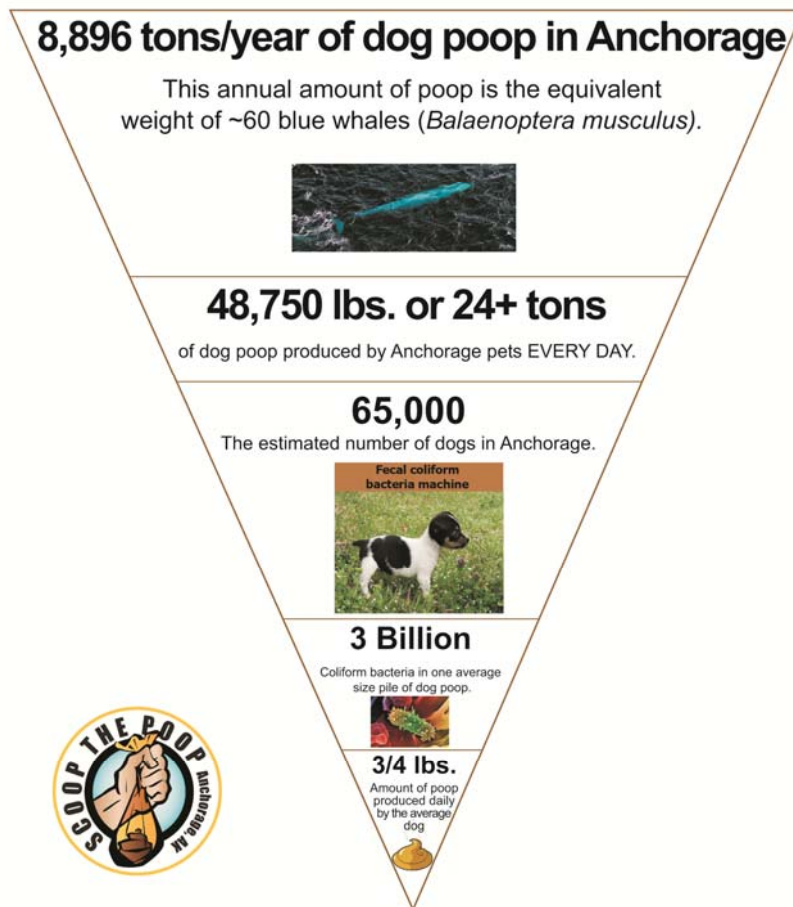
Sign Placed on PVC Bag Holder



When tabling, AWC is still using the "Scoop the Poop" brochure that was updated in 2014 to reflect new committee members. Currently there is an email list of 35 people who are interested and participate in some form (attending meetings, organizing and staffing events). On January 27, 2016, the first 2016 meeting of the Scoop the Poop committee was held.

One document that was updated in 2015 is the "Poop Pyramid". This graphic (18" x 24") is displayed at all events and always attracts people. It is based on the estimated ~65,000 dogs in Anchorage, and provides a different perspective on the amount of Anchorage's daily pet waste.

The Poop Pyramid



**So, Scoop Your Poop and Save a Whale!
And your local waterways too!**

As mentioned above, AWC has ramped up its presence on social media. In 2011, AWC began Facebook pages for “Anchorage Waterways Council” and “Scoop the Poop Anchorage”. According to stats for the 2015 period, nearly 5,000 Facebook viewers were reached on posts specifically regarding pet waste and keeping runoff water cleaner. Following are a few examples from the “Scoop the Poop Anchorage” Facebook pages. The number of posts on the “Scoop the Poop Anchorage” page has grown from one a week in 2011 to nearly one a day in 2015.



Posted: *October 22, 2015 - Do you live in the Turnagain (Wisconsin St/Milky Way Ave) neighborhood? Anchorage Waterways Council's 3rd donated Pet Waste Bag Dispenser has been installed at Balto Seppala Park. That makes a total of two at this park now!*

We love that you are walking your dogs and want to make cleanup a little easier. (354 people reached).

This infographic came from Earth-Rated, a Canadian company that manufactures “personal” pet waste bags that fit in a container that attaches to the dog’s leash. A very generous company, they have donated products to AWC to distribute. Visit them at

<http://www.earthrated.com/en/home/>.

This post was shared on AWC’s “Scoop the Poop Anchoage” page on June 27, 2015, and 900 people were reached.

Dog Poop Doesn't Disappear!
Why You Should Pick Up Your Poop.

Dog poop is too acidic to be good fertilizer – it actually damages grass.¹

Did you know there's 23 million coliform bacteria per gram of poop?²

Dog poop can contain Campylobacteriosis, E. coli, Giardia, Parvo, Tapeworms, Roundworms, Salmonella and Coccidia. Some of these can linger in soil for years.³

Dog poop is a pollutant. The EPA classifies dog poop in the same category as oil spills.⁴

Wastewater treatment facilities are not able to filter bacteria from dog poop.⁵

The ecosystem can handle wild animal poop, but isn't ready for the amount of poop from the number of dogs in our cities.⁶

Dog poop can make other dogs and people sick.⁷

earth rated

¹http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ²http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ³http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ⁴http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ⁵http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ⁶http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/ ⁷http://www.earthrated.com/en/home/earth-rated-dog-poop-is-too-acidic-to-be-good-fertilizer-it-actually-damages-grass/

“Creeks as Classrooms”--Student Education

AWC’s ever-popular “Creeks as Classrooms” completed its 6th year with nearly 4,300 Anchorage youth participating in creek-related activities from May to October. Water quality is tested, and macroinvertebrates are collected, identified, and then discussed in terms of which ones can or cannot survive in polluted water. This is a great way to introduce students and summer campers to our creeks in a safe environment while discussing what the causes of water pollution. Further, the macroinvertebrates are a perfect way to capture their interest and to prepare young people to be good water stewards. Annually, over 4,000 students have gone through this program, and it keeps growing.



Students from East High taking water quality samples and collecting macroinvertebrates from Chester Creek

Monofilament Cleanup and Recycling Focus

Due to the increasing presence of plastics in the ocean and their deadly effects of them on fish, marine mammals, and birds, AWC decided to focus on some of the other detrimental trash that leaves our watersheds—fishing line or monofilament. Anchorage’s urban streams and lakes are easily accessible to residents and visitors for a variety of fishing opportunities. After seeing a Common Loon (*Gavia immer*) with fishing line tangled on its head near a popular fishing platform on Jewel Lake, AWC became alarmed at the situation and began to research the impacts on fish and wildlife.



Common Loon at Jewel Lake with monofilament wrapped around its beak (8/30/14)

AWC staff spent the next few hours gathering up loose monofilament at Jewel Lake, and then Alyeska Pipeline Service and BP employees cleaned up monofilament for AWC's "Day of Caring" project which is sponsored by United Way. In just a few hours over 21 miles of monofilament line had been collected. It was cleaned, bagged, and sent back to the Berkley Conservation Institute (www.berkley-fishing.com/Berkley-recycling.html) in Iowa to be turned into fish habitat.



Monofilament on ground by Ship Creek



Monofilament on storm drain that empties into Ship Creek

AWC wrote a Challenge Grant to the Anchorage Parks Foundation. With the \$1,500 grant (that was matched by in-kind labor), AWC staff teamed up with an Eagle Scout candidate, Kyler Ince, to build and deploy 21 monofilament recycling stations around the Municipality. By mid-summer of 2015 the stations had been built by Kyler and fellow Scouts and placed at popular locations fishing.



The 21 monofilament bins were emptied at the end of summer 2015, the collected monofilament was sent to Berkley for recycling, and the bins are going to be checked before the 2016 fishing season. An ice-fishing day sponsored by the Alaska Department of Fish and Game will be held February 12-14, 2016, and approximately 1,400 youth will attend the event at Jewel Lake. AWC staff will be there to educate the youngsters about cleaning up when fishing—not only monofilament but other things that should not enter our waterways.

Changes in Yard Chemicals, 2010 to 2014

In 2010, AWC conducted a Watershed Perception Survey that was modeled after two others that had been done in the Municipality in 1996 and 1997. Most of the original questions were retained, although some parts had to be updated. This survey was repeated in 2014 to evaluate the effectiveness in outreach and education over the preceding 4 years of the APDES permit. In both cases, an online survey was given to a random sampling selection with a 95% confidence level within the Municipality. Overall, there are nearly 40 questions, but for this report the focus is only on changes regarding yard chemicals.

In the 2010 survey (n=527), 5% of the respondents reported that Lawn Care Products were one of the top perceived threats to Anchorage water quality. This ranked 7th place on the list of answers provided by respondents, however in the 2014 survey (n=681) it had moved up to #3 on the list and was a concern of 18.6% (an increase of over 13%) by those taking the survey.

There were 3 other important questions regarding yard care, but the use of chemicals is the most germane. Respondents were asked, “[a]t your residence, do you or a gardening service apply any of the following lawn or garden products? Please check ALL that apply.” The choices were: fertilizer, weed killers/herbicides, and pesticides, and respondents could answer in several categories.

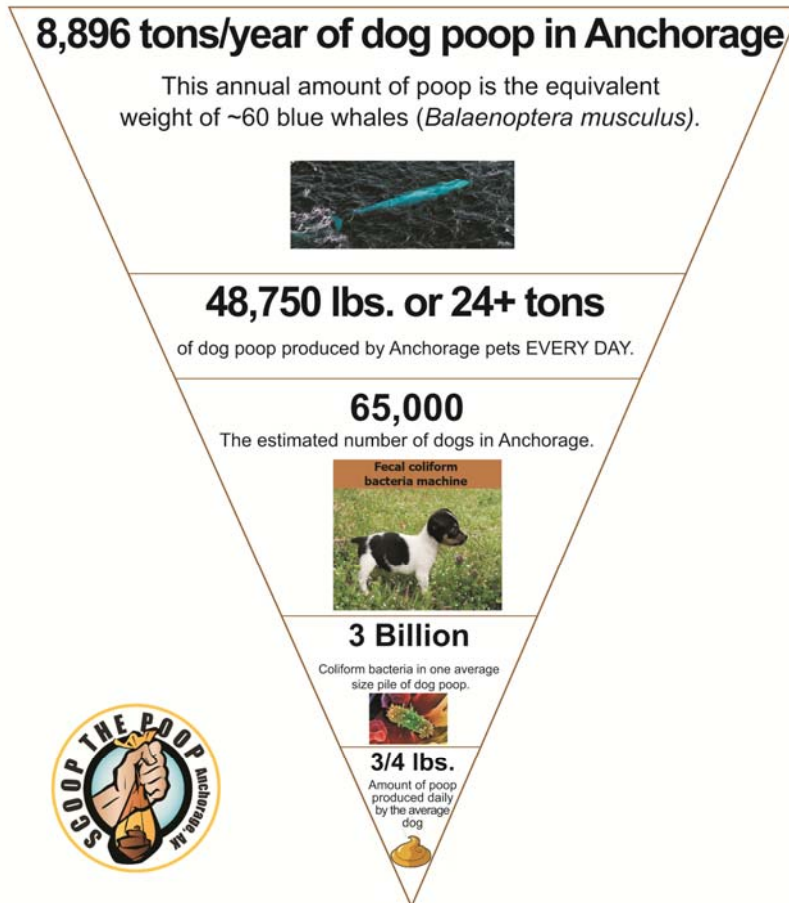
Chemicals	2010	2014	% change
Fertilizers-conventional, organic, both	58.3%	55.5%	-2.8%
Herbicides-conventional, organic, both	36.6%	36.7%	+0.1%
Pesticide-conventional, organic, both	21.4%	17.1%	-4.3%
None applied	64%	74.7%	+10.7%

The results show a definitive improvement in chemical reduction especially in those who did not apply any chemicals with nearly an 11% decrease over the 4 years.

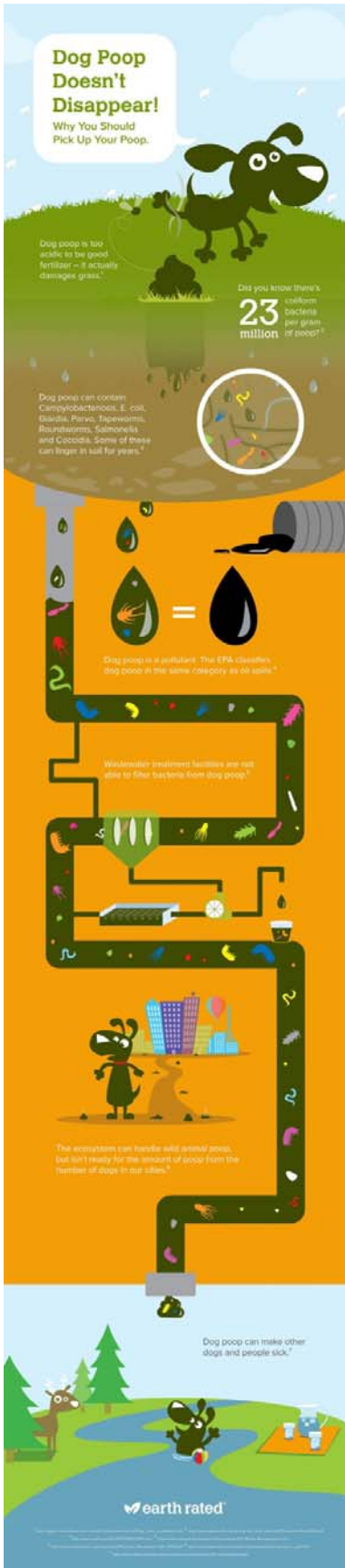
In conclusion, AWC is confident that positive progress is being made with its outreach programs. The Municipality is responsible for funding the majority of the outreach program, but there are other grant opportunities that have been woven into the overall theme of education on stormwater runoff. These other programs help AWC to reach many more audiences. There are several signs of improvement, yet the job is certainly not done, and AWC has a strategic plan for the upcoming 5 years of the new permit. As technology evolves, especially in how people receive information, AWC will be responding to the challenges of educating the public on stormwater, water quality, and other issues.

Attachments
Copies of Education Materials

The Poop Pyramid



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And your local waterways too!



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