

FY 2017 ACWA Grant Report on “Assess Existing Waterfowl BMPs on Fish Creek Project”

By Anchorage Waterways Council

After completing the analyses of the face-to-face and observational surveys, some key elements have been identified from the FY 2016 Cuddy Park project. But first, it must be recognized that the signage from the FY 2016 grant went up within a few days of some major landscape modifications to the park. There was not really a time period when just the impact of the signage could be observed, although there are some other Best Management Practices (BMPs) that were created and not hampered by the landscaping which will be addressed in the Face-to-Face survey.

Observational Survey:

Over a 9 week period from July 2016 to September 2016, Ellicia Turner spent ~17 hours observing park visitors. The objective was to watch for people feeding the waterfowl and looking at the new signage. During this period she went to Cuddy Park on different days, times and during various types of weather. The chart following shows the date, the number of people she saw during the hour she observed, the weather, and the day of the week.

| Date | # of people | Weather | Day of the week |
|-----------|-------------|---------------|-----------------|
| 7/22/2016 | 8 | raining | Friday |
| 7/27/2016 | 23 | cloudy | Wednesday |
| 8/15/2016 | 63 | partly sunny | Monday |
| 8/16/2016 | 58 | sunny | Tuesday |
| 8/17/2016 | 65 | cloudy | Wednesday |
| 8/19/2016 | 38 | overcast | Friday |
| 8/23/2016 | 24 | showers | Tuesday |
| 9/3/2016 | 44 | sunny | Saturday |
| 9/4/2016 | 25 | cloudy | Sunday |
| 9/13/2016 | 38 | cloudy/windy | Tuesday |
| 9/15/2016 | 23 | raining | Thursday |
| 9/16/2016 | 8 | raining | Friday |
| 9/20/2016 | 56 | Lt. rain/wind | Tuesday |
| 9/23/2016 | 46 | sunny | Friday |
| 9/28/2016 | 17 | sunny/cool | Wednesday |
| Total | 536 | | |

During her nearly 17 hours of observation she only saw one family of four that was feeding waterfowl. Although over 500 people were observed in the park during her visits, they were engaged in a variety of activities, such as walking, jogging, dog walking, using the playground, bicycling or bird-watching. Only 41 people were noted as interacting with the birds in some manner, which is fewer than 10% of the total users. And, only one group of four actually fed the waterfowl. It must be kept in mind that the blue landscape fencing was up at this time which kept the birds and people fairly well separated. (See Appendix for blank copy of the survey.)

Also noted during the observation times were 18 people who looked at the new signage. And again, the fact that two of the signs were partially obscured by the fencing must be taken into account.

Conclusion: Although this survey period was over a relatively short span of time when the geese were present, and it was for a very limited overall amount of time—there was definitely a reduction in the number of people feeding the waterfowl. It is difficult to differentiate how much of a role the fencing and landscaping played, but it was probably considerable. What needs to be remembered is that the signage helped explain why the fencing was up if people

wondered what was going on. There was no specific information available on why temporary fencing was up other than the new landscaping—and perhaps people thought it was to keep them off the newly planted areas. Without having an opportunity to ask the park visitors what their original intent was about feeding, it’s difficult to conclude how much the signage stopped anyone from feeding. Regardless, the feeding was reduced exponentially, and it is more likely that several BMPs had an impact as will be revealed in the Face-to-Face Survey analysis.

Face-to-Face Survey:

Over 7 weeks (Thom Eley was out of the country for most of August) between July 28, 2016, and September 17, 2016, 48 Face-to-Face surveys were completed by Thom Eley. Four of the surveys were done on the weekend, and two during the week. The weather was clear with temperatures ranging from the mid-50s to 75 degrees F. The following chart shows the date, the number of surveys per day, the weather, and the day of the week.

| Date | # of interviews | Weather | Day of the week |
|-------------|------------------------|----------------|------------------------|
| 7/28/2016 | 12 | Clear/75 | Thursday |
| 7/31/2016 | 9 | Clear/67 | Sunday |
| 8/27/2016 | 7 | Clear/74 | Saturday |
| 9/3/2016 | 9 | Clear/68 | Saturday |
| 9/14/2016 | 4 | Clear/54 | Wednesday |
| 9/17/2016 | 7 | Clear/58 | Saturday |
| | 48 | | |

Face-to-Face surveys differ considerably from observational because you garner more information from the respondent. Observational surveys were only in regard to the signage and landscape changes at Cuddy Park and how they impacted the park visitors’ actions. In the Face-to-Face surveys the respondents were asked about other BMPs that they might have encountered. Probably the most telling feature about the effectiveness of the outreach efforts is found in the following questions and responses. (See Appendix for blank copy of the survey.)

Question 4. Have you seen or heard any information on the problems of feeding waterfowl at Cuddy Park?

Of the 48 interviews, 37 (77.1%) had heard of the problems with feeding waterfowl, with some having heard from more than one source (Table 3). There were a total of 10 different sources that would have potentially provided the 37 respondents with information about the problem. The 37 respondents listed 5 different sources where they heard about problems with feeding waterfowl, and, in total, there were 51 answers listed because some learned from more than one source. Eleven (22.9%) respondents had not heard anything about feeding waterfowl. Signs in the park were the most common way people learned of the problems (52.4%) followed equally by bus signs and newspaper articles (Table 3).

| Activity | Number | % of Responses |
|---|---------------|-----------------------|
| No¹ | 11 | 22.9% |
| Bus Signs | 12 | 19.7% |
| Signs in Park | 32 | 52.4% |
| TV News Report | 3 | 4.9% |
| Newspaper Articles | 12 | 19.7% |
| Facebook | 0 | 0.0% |
| Friend | 2 | 3.3% |
| Newsletter | 0 | 0.0% |
| Radio | 0 | 0.0% |
| Website | 0 | 0.0% |
| Event | 0 | 0.0% |
| TOTAL FOR EACH CATEGORY ² | 61 | 100.0% |

What jumps out from this table is that the number of people looking at signs in Cuddy Park is the largest number of responses reported—over 50%. The number for the Observational group might have been higher, but that will remain unknown because they weren't asked. Another important feature from this table is that bus signage and newspaper articles both (12 responses) were each a good form of information to about 20% of the group. It's helpful that other forms of outreach were used. No radio was used to impart information, and there was no particular event. Facebook and the AWC e-newsletter were both put out in large numbers, but it's difficult to say what the odds are that any of the survey group would have seen either. It's also nice to see that some people heard from friends—word of mouth.

¹ The percentage associated with a No response is based on the 48 respondents who volunteered to do an interview. The remaining percentages are based on those who responded "YES."

² Total for each activity exceeds 51 interviews as some interviewees had heard from several sources.

Another important question from the Face-to-Face survey was what brought the visitors to the park.

Question 1. What brought you to Cuddy Park today (check all that apply)? The responses follow.

| Table 1. Why was respondent at Cuddy Park? | | |
|---|---------------|-----------------------|
| Activity | Number | % of Responses |
| Bird Photography | 1 | 1.3% |
| Bird Watching | 19 | 25.3% |
| Feed Birds | 4 | 5.3% |
| Fly Glider | 1 | 1.3% |
| Hang Out | 1 | 1.3% |
| Living in Vehicle | 3 | 4.0% |
| Lunch | 1 | 1.3% |
| Playground | 19 | 25.3% |
| Smoke | 2 | 2.7% |
| Solitude/Contemplation | 5 | 6.7% |
| Train Dog | 2 | 2.7% |
| Walk | 11 | 14.8% |
| Walk Dog | 5 | 6.7% |
| Writing Wedding Invitations | 1 | 1.3% |
| TOTAL FOR EACH ACTIVITY* | 75 | 100.0% |
| *Total for each activity exceeds 50 interviews as many interviewees were participating in several activities. | | |

In reviewing this table, fourteen activities were listed by the 48 respondents. Almost 32% of the respondents were there to interact with the birds in some manner: bird photography, bird watching, and bird feeding. They are a definite attractant to the local park visitor as is found nationally and worldwide. A simple Google search “how to keep people from feeding waterfowl” brings up hundreds of good reasons about why they shouldn’t be fed. It just takes a second to see this problem ranges throughout the United States and in other countries as well. Anchorage is not unique but in terms of taking a proactive stance the signage (bus and park) and media attention are having an impact. And, the landscape change cannot be dismissed as an effective BMP as well. Just putting up the fencing and adding plants and shrubs would probably not be as effective unless people understood the reason(s) for it. It is clear from a few responses that stopping access to the ponds irritated some people, especially those who wanted to water train their dogs.

Conversely after people started to get used to being funneled around the park by the blue fencing and later the more permanent wire fencing, many expressed appreciation for the clean walkways. Not everyone at Cuddy Park is there to feed the birds as is shown. It is a high-use recreation area and people have for years stepped over and around bird feces.

Conclusion: These surveys, despite their limitation in terms of time that could be spent and the almost simultaneous appearance of the landscape fencing and planting with the sign installation, appear to show that there were positive results from the BMPs. The number of people observed feeding the birds dropped precipitously, the park was immediately much cleaner, visitors were looking at the signage, and fecal coliform tests performed by AWC in Cuddy Pond show a decrease of fecal coliform colonies by 50% between August 2015 and August 2016³ and substantially more by September 2016.

³ These tests were not part of the ACWA grants but were used by AWC to compare fecal coliform (FC) counts over time. SGS Laboratories performed them at no cost. On August 5, 2015, the main part of the Cuddy pond measured 8100 FC colonies/100 ml of water and on August 3, 4

Recommendations for Future Outreach Efforts:

Albeit these two surveys had some constraints, e.g. it would have been preferable to have the signage up earlier in the season and with a greater time span between the landscape modifications and fencing, but there were still some significant results. Part of them came from BMPs other than the signage such as the bus signs and media reports, but the park signage accounted for over 50% of the information imparted about the impacts of feeding waterfowl from 61 responses. This is impressive considering that 2 of the 4 signs were not as visible as the others due to temporary fencing and the park itself spans 15 acres.

One of the subtle but noticeable waterfowl behavioral changes in the late fall was the fact that fewer geese and ducks in the pond were drawn towards a human presence than in the past. More encouraging was that many geese were grazing on the park and library lawns prior to migrating and ducks were eating water weeds out of Cuddy pond. This is what they are supposed to do.

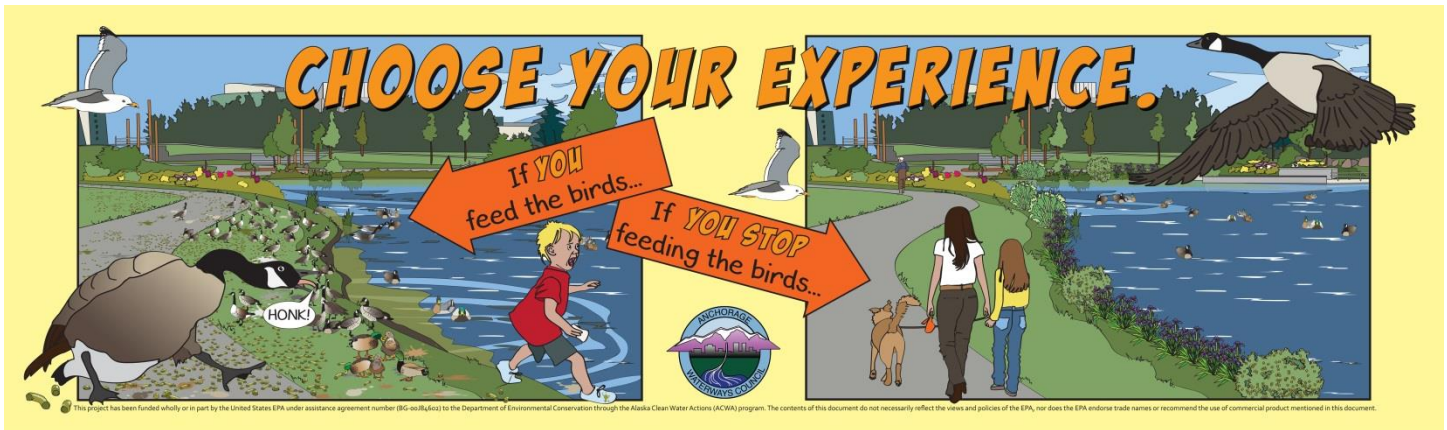
In May 2017 the Muni's People Mover buses have been fitted again with 5 signs to run several weeks into the summer. A recent check of the park signs shows that they are in excellent condition and the interactive wheel still works. Additionally AWC's summer intern, Veronica Campbell, is continuing the observational surveys at Cuddy Park. AWC will provide the results of these upon completion.

If AWC were to continue with outreach for this project and for trying to change behaviors in other situations (i.e. people not picking up after their pets), there are some changes we would make. We have learned over the past few years from our Scoop the Poop campaign that small rack card handouts are not as popular as they might have once been. If one visits a new place and sees a large rack card display with all sorts of inviting activities or places to dine, it is more likely that a person will pick up a handful of these cards and peruse them. Sitting in a single holder in appropriate venues as well as placing simple rack cards on pet waste stations showed us that people just weren't interested in picking them up to read. A few years ago AWC put punched "Scoop the Poop" rack cards on the doorknobs of residential areas where a lot of pet waste was accumulating in common areas. It's difficult to evaluate whether or not people took the time to read the rack card or whether they just tossed it. It is my feeling that a good, catchy, stationary sign is probably more effective. The basic "Do not feed the birds" signs have shown that they are pretty much ignored as is shown here.

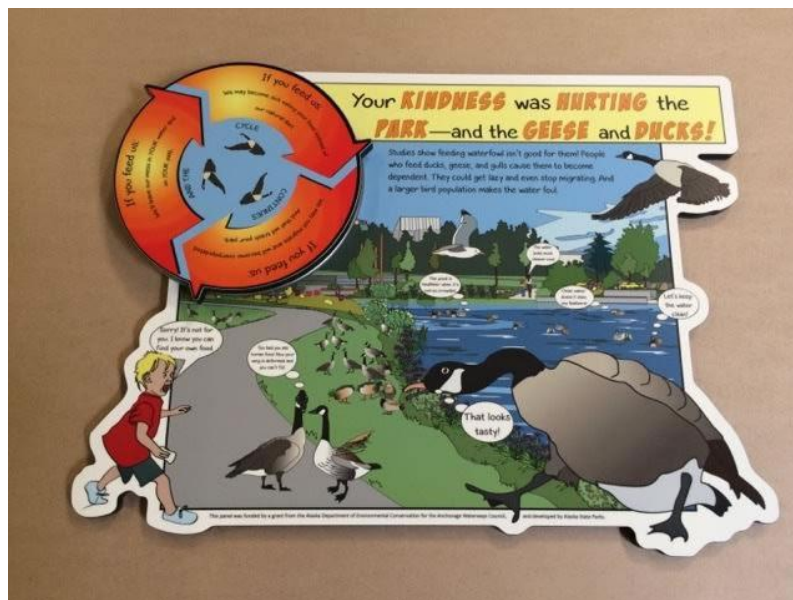


2016, the same area measured 4300 FC colonies/100 ml of water. On September 13, 2016, the count was all the way down to 230 FC colonies/100 ml of water. This is also close to the time when geese began to migrate, which may speak to part of the difference. However, over the winter well over 200 mallards remained in the pond even as it froze up, but getting down to test the water was not safe.

People working in design communications are changing the way they do business. Signage needs to have fewer words, more pictures, interesting artwork, at least 3 repetitions of the message, and some other component that will attract viewers. We feel that the signage that was eventually developed for Cuddy Park is effective in capturing peoples' attention. The same sign design was altered to produce the bus sign mentioned above in the surveys and shown immediately below. Additionally the artwork was used to create a black and white handout for children to color.



Bus signs for Anchorage People Mover buses



Stationary Cuddy Park sign

While AWC has learned in some other research projects that people like to “get” their information over email and social media, it’s almost impossible to target park users and how they want to be informed. One solution might be to convince the Anchorage Park Foundation to place information on the Cuddy Park webpage⁴ and how feeding the waterfowl is detrimental to the park, the waterfowl, people and the larger environment. This message could be seen specifically by those seeking information on Cuddy rather than trying to target a group of users who are anywhere. By and large it would seem that the most effective way is still to have interesting stationary signage at the location. And, unfortunately, it’s not inexpensive. Also at tabling events the whole issue can be discussed on a one-to-one basis which is useful.

And water testing of Cuddy Pond has begun thanks to SGS Laboratories. The results from this summer will be placed in a table along with previous fecal test results and submitted. Habits don’t change quickly. As more people become aware

⁴ At <http://anchorageparkfoundation.org/directory/cuddy/>

of the downside of feeding birds (for the birds, the environment, and even potentially humans and their food sources⁵), hopefully the number of bird feeders will decrease. There will always be the “stealth” feeders, who may or may not know or care that it’s a poor practice for the birds and the environment, but they will continue most likely in a somewhat guarded fashion. If they are the only ones out there feeding, it will be difficult to not be noticed.

Contrary to the thinking of many, the birds have evolved and lived long enough without food assistance from humans to figure out when their free meal is over and they might need to migrate. To quote former Alaska Department of Fish and Game biologist Rick Sinnott, “If everyone stopped feeding ducks today in Anchorage they wouldn’t starve to death. It would only take mallards a few hours to join their wild brethren in Prince William Sound or Kachemak Bay. The hours of standing webfooted on ice, the pitiful mass scramble towards each arriving vehicle, the jostling to be first in the queue are all an illusion created by some of the world’s most accomplished moochers.”⁶

Now, all we have to do is get humans under some control as a recent incident illustrates. Sadly, just over a month ago⁷, a young man who was engaged in a fight with his girlfriend in the Cuddy Park parking lot appears to have intentionally in a rage run down some mallards that were settled on the ground. While what he did appeared to bystanders to be deliberate, it might not have had the same outcome if people could have refrained from dumping food up in the parking lot and placing straw for the ducks for bedding throughout this winter. These actions result in the ducks congregating in the parking lot where the food arrives and where there was straw to bed down on, which makes it difficult to drive and park even under the best of circumstances. Very often the birds just don’t move. They are becoming very habituated to people and cars and this is a perfect example of why people need to just look and not interact with them.

The problem of feeding waterfowl is widespread and there are numerous approaches from herding dogs to automated radio-controlled vehicles with flashing lights to keep birds away from an area. That’s pretty much not practical in a park with a variety of users. The most successful solution is to keep educating the park visitors on their impacts.

⁵ According to Ned Rozelle, “Wintering mallards could conceivably play a role in the perpetuation of extremely economically costly poultry pathogens in Alaska,” said Andy Ramey, an expert on avian flu with the U.S. Geological Survey Alaska Science Center in Anchorage via email. These viruses “have the potential to cause disease not only among domestic poultry, but also in pet or backyard birds and numerous species of wild birds, including raptors.”, *Anchorage Daily News*, Mar. 12, 2017, at <https://www.adn.com/alaska-news/science/2017/03/10/a-handful-of-mallard-ducks-overwinter-in-alaska-heres-what-researchers-have-learned-about-them/>.

⁶ From <http://www.adn.com/article/20140207/anchorageduckswillingshunmigrationlittlextrabreadevenifkillsthem> *Anchorage Daily News*, Feb. 7, 2014.

⁷ <http://www.ktva.com/officials-investigate-ducks-killed-cuddy-family-midtown-park-467/>

APPENDIX

Field Observation Form

Face-to-face Observation Form

Cuddy Pond Field Observation Form

Date: _____ Time Arr: _____ Time Dep: _____ Interviewer: _____

Weather: _____

1. Approx. number of vehicles in the parking lot (describe which lot): _____ (arrival) _____ (depart)

2. Number of people seen **interacting** in any way with waterfowl **upon your arrival** (best guess):

- Group size/composition:

- Ethnicity:

- Genders:

- Ages:

- None seen:

- What are they doing:

3. Activities observed (#'s): Single walker _____ Group walkers _____ Family walkers _____ Joggers _____

Dog walker _____ Bicycling _____ Birdwatching _____ Playground users _____

Other activities: _____

4. Number of people who notice and stop to read signs: _____

5. Number of people who read sign and then feed the waterfowl:

- Group size:

- Ethnicity:

- Genders:

- Age composition:

- If there is feeding, is feeding outright or more guarded?

- None seen:

6. What sorts of food are they feeding the waterfowl?

7. Other observations of interest related to waterfowl (chasing by people, bird showing aggressive behavior toward people, birds with deformed wings, etc.).

8. Personal comments (your general observations or thoughts):

Face-to-Face Interview

1. What brought you to Cuddy Park today (check all that apply)? Walk___ Walk dog___ Jog___ Playground___
Library___ Birdwatch___ Feed the birds___ Picnic___ Hang out___ Fly kites___ Solitude/contemplation___
Other_____

2. Where are you from?

3. What do you think of the condition of the park?

4. Have you seen or heard any information on the problems of feeding waterfowl at Cuddy Park? Yes or No (circle)

If NO, direct them to the signage

If YES, then ask source of information (*all that apply*):

Bus signs___ Signs in Park___ TV news report___ Newspaper article___ Facebook___

Friend/another person___ Newsletter___ Radio___ Website___

Event (Migratory Bird or Potter Marsh Days)_____

Other:_____

5. Have you looked at the new signage around Cuddy Pond about feeding waterfowl? Yes or No (circle)

6. If yes to 5, ask what they learned from the signs:

Water quality issues___ Human food is an unhealthy diet for waterfowl___ Excessive bird waste on paths___

Waterfowl dependency & abnormal behavior patterns___ Aggressive behavior from birds___

Other:_____

7. Do you know that Cuddy Pond is an open area of Fish Creek? Yes or No

(Explain if they are puzzled: Most people don't know what or where Fish Creek is. If they are confused or ask about it, just say that it is a creek that used to run all through midtown Anchorage, between Campbell and Chester Creek, but is now mostly underground.)

8. OPTIONAL: Would you wade or swim in the pond or would you let your children or pets get in the water? Yes or No

9. Any additional thoughts about water quality of streams and lakes in Anchorage or feeding of waterfowl?

Thank you for your time and if you get a chance, please read the new signage around Cuddy Park about waterfowl.

Demographics of who you interviewed, please fill this out based on what you saw:

- Group size/composition:
- Ethnicity:
- Genders:
- Ages: