



**City of Bloomington
Environmental Commission**

The mission of the Environmental Commission is to advise the City of Bloomington on how its actions and policies may preserve and enhance the quality of Bloomington's environment, including the life-supporting processes that natural ecological systems provide to humans and other organisms.

ENVIRONMENTAL COMMISSION MINUTES

17 February 2022, 6:00 PM

1. Call to order and quorum confirmation:

Call to order at 6:03 PM.

Matt Caldie Present
Sam Armstrong Present
Don Eggert Present
Mike Litwin Present
Megan Murphy Present
Dedaimia Whitney Present
David Parkhurst Present
Carrie Albright Present

2. Introductions:

Our new commissioners are Megan Murphy and Carrie Albright

Megan Murphy is an academic lecturer in biology. Her interests are in evolution, animal behavior and entomology. Megan also likes to be outside!

Carrie Albright was a part of the commission a few years before and is excited to start up again.

3. Approval of minutes: *

Dedaimia motioned the minutes and Sam seconded.

Matt Approved
Sam Approved
Don Approved
Mike Approved
Megan Approved
Dedaimia Approved

Minutes were approved unanimously.

4. Public comment: Limit 5 minutes per person, 20 minutes total

Chris Neggars was the first to comment. He is a citizen of Bloomington and a former member of the EC. Professionally he works for The Nature Conservancy. He wanted to bring awareness to the EC about how their website has incorrect information about environmentally friendly lawn care. Specifically, there is a homemade herbicide recommendation that includes using vinegar, salt, and soap to control unwanted plants. Homemade herbicides such as this aren't very effective and are harmful to the environment. They can kill all living things and alter the soil chemistry permanently. Chemicals that are specifically designed to remove invasive/unwanted plants are healthier for the environment. The severity of using a homemade pesticide like this is against federal law when being applied by a licensed applicator. Matt suggested reviewing the website worksheets in their entirety because they are all fairly old and may have outdated information. Ellen Jacquart who is the president of MC-IRIS also came to give a public comment. She mainly came to support the previous claim by Chris. She reaffirmed that if you are looking to remove a plant, use a legal herbicide. This is because the legal herbicides have been tested and their environmental impacts are known. They have strict instructions to ensure that their footprint is mitigated as much as possible. Dumping salt on the ground to control invasives can severely harm wildlife, such as warms, nematodes, etc. Mike asked what Ellen thought of glyphosate. She has had a lot of personal experience studying glyphosate and it is the most studied herbicide in the world. The studies she is aware of have not found a direct negative impact to applicators using this herbicide. It is also a short-lived herbicide and isn't mobile, which is a good thing when applying something to an open system. Glyphosate is the safest herbicide that we can use (when following the labeled directions). Sam mentioned the fear that comes with herbicide if applying it near our food resources.

5. Speaker: Maggie Sullivan, Results of Monroe Lake Study & Next Steps

Lake Monroe Watershed Management Plan Overview: Lake Monroe is technically a reservoir and was constructed in 1964. FOLM looked at ways they can protect the watershed. A watershed is the area of land that drains to a particular water body. This is important to know because whatever is happening on that land can be washed into a body of water. This project is specifically looking at non-point source pollution. Things like manure, septic system leakage, and fertilizer can leak into the water body through the watershed. Lake Monroe's watershed is 440 Sq Miles. 56% of the watershed is in Brown County, 21% in Monroe County, 21% in Jackson County, 2% Bartholomew County, and <1% in Lawrence County. Bloomington is mostly outside the watershed boundary. A Watershed Management Plan is a clear plan of action for addressing water quality goals. It lays out the problems and suggests solutions. This has been a two and a half year planning process that was started by FOLM. They received a grant and matching funds. FOLM put together a steering committee made up of 20 stakeholders from counties of Monroe, Brown, and Jackson. There was a lot of community engagement. They directly reached about 400 people. They had community forums, public presentations, school programs, and volunteer samplers. All four of these activities had over 100 participants. They also implemented community education through 29 watershed signs, 15 newspaper articles, 2 watershed tours, 2 television stories, and 2 public service announcements. A lot of the project was reviewing existing data. The watershed is about 84% forested, but also has some agriculture located among the main streams. They observed 242 stream crossings to see if there were any issues and cataloged the state of the streams. There is quite a bit of stream bank erosion throughout the watershed. This is mainly because the area has highly erodible soils. They also looked at whether or not there was a riparian buffer on the sides of the streams. They did a lot of water quality sampling as well. They sampled five tributaries monthly for a year. North fork, Middle fork, Crooked Creak and South Fork are the main tributaries. They also sampled what was coming out of the lake and three locations within the lake. A water sampling blitz was

conducted twice at 125 different sites. Volunteers went to the sites and collected water samples. They identified 11 problems (sediment, nutrients, E. Coli, Recreational Impacts, forestry impacts, biological Impairment, flooding, lack of governance, lack of education, trash, and invasive plants. They mainly focused on sediment, nutrientism and E. Coli. Sediment is a concern for two reasons, it fills in the lake and it brings in nutrients and other pollutants with it. The lake water itself didn't have high level of total suspended solids. 35,696 tons of sediment is stored within the lake each year. Most of the sediment coming into the lake is from North Fork above Yellowwood. They looked specifically into nutrients and their relationship to harmful algae blooms. Lake Monroe is mildly Eutrophic, which means it is slightly more productive than we would like it to be. 48% of the phosphorus coming into the lake is stored within the sediments. The highest phosphorus levels were in the deepest part of the lake during the summer months. This is happening because phosphorus is being released from the sediment due to oxygen levels dropping down to 0 in the summer. It is important to note that even if all the phosphorus is removed from the watershed, there will still be phosphorus being released from the sediment in the summer months. E.Coli is a concern because it is indicator of fecal contamination which has a number of pathogens that can lead to beach closures. The E. Coli levels during the study were much lower than the allowed levels. When looking at the levels of E. Coli in recent history, there were exceedances in 2015 and 2016. The tributary South fork was the largest contributor of E. Coli to Lake Monroe. The biggest take away is that E.coli is a wide spread issue. Of the tested samples, the E. coli was coming from both human and animal sources. Septic system failures may be causing 1%-25% of the E.Coli in the watershed. This is difficult to estimate. It is known that a large number of the systems in the area are over 30 years old and the lifespan of them is 30 years. Five of the 16 sub watersheds were identified to have the most issues. These included the watersheds of Stephens Creek, Clay Lick Creek, East Fork Salt Creek, Kiper Creek, and Tipton Creek. Agricultural best practices are needed to conserve the watershed. This includes riparian buffers, cover crops, and low till management. In the forestry sector, careful road designs are key. People should be pumping their septic systems every three years. Stream banks might want to be pulled back and planted on to decrease erosion. A big part that is proposed in the action plan is education. They will be asking people to take water quality pledges in the form of pumping septic systems or picking up animal waste. There is a septic system cost share program that will provide \$100-150 per household of assistance to help people pump their septic system. They also want to identify landowners that might be willing to implement some of the project solutions mentioned earlier, on their property. This will help in the process of creating a database of these actions. They are hoping to get a second large grant this fall worth \$299,200. This would be implemented for two and half years. This entire action plan has a 20-year scope.

6. Reports from: Tree Commission (TC), Monroe County Environmental Commission (MCEC), Bloomington Commission on Sustainability (BCOS), Environmental Resource Advisory Council (ERAC), Metropolitan Planning Organizing-Citizens Advisory Council (MPOCAC), Friends of Lake Monroe (FOLM), & Monroe County-Identify and Reduce Invasive Species (MC-IRIS), Environmental Commission Planning Committee (ECPC).

TC: They changed their meeting time. The urban forester Erin Hatch has been getting feedback on the bicentennial tree planting project that will be in six different areas of the city. She also put out bids. The Davey Resource Group will implement this project. IU has received approval for its tree campus USA status. They updated their tree care document as a part of this process, and they are going to inventory trees on all 7 campuses to ensure the health of the trees in the area. Tom Coleman is now resigning from the commission.

MoCo: Sam was unable to get into the meeting. From the agenda, they were going to discuss Indiana State Bill 411, which is about renewable energy.

BCOS: Some of the meeting time was dedicated to internal issues related to amendments, which they were unable to act on because they didn't have a quorum. Most of the meeting was discussing the details for their upcoming presentation on environmental justice. There was mention of the potential merger between BCOS and the EC.

ERAC: At Lower Cascades they are widening the stream channel and putting in a boardwalk and viewing platform. They also plan to take 23 trees out and plant 100+ more. There will be an extension of the clear creek trail a quarter mile north of the Woolery Mill. The Griffy loop trail project updates are in progress. They are going to try and get rid of the Eurasian watermilfoil. On April 30th there will be a stream cleanup at the Jackson Creek Park. The parks department will have a climate action team related to the CAP.

MPOCAC: We do not have anyone attending these meetings. Someone needs to be assigned this committee.

MC-IRIS: The minutes have been sent out. Don believes MC-IRIS should collaborate with the EC and BCOS. MC-IRIS is working with Canopy Bloomington.

ECPC: There are two cases for this month's agenda. Strauser construction will be building a self-service storage facility at 3000 South Walnut St. The other one is Grant Properties at 613 east 12th St. There they want to take down a single-family structure and build a 4 story building with parking on the bottom and 3 floors of residential units above that. The petitions that will be heard are the following: Trinitas Ventures is asking for an amendment for their district ordinance, the trades district technology center will be presenting a major site plan to allow a nonresidential building in the trades district. Everything else on the agenda is just updating the UDO. No substantial updates.

7. Discussion from active working groups:

A. Biodiversity: Update on Connectivity Plan and neighborhood meeting

Ben gave a presentation on the HCP a few weeks before. Over 20 people attended the meeting. If anyone wants the presentation, please email Ben. Linda and Ben were asked to attend a neighborhood meeting in March. The map, pledge, and brochure have not been sent out.

B. Eco Heroes

A teacher letter and business letter has been sent out. A poster has also been made. The theme will be "Fighting Fragmentation". The committee now includes Megan, Matt, Sam, Carrie, Dedaimia, and Don. April 23rd is the official Eco Heroes Day. We could also use some help fundraising and advertising the event.

8. Old business:

A. Discussion regarding Plan Commission memos and the EC Plan Committee

We need to decide what the plan is for the future. How can we fill in the roles Linda did? Whether it can be split between multiple people or if other strategies are needed to tackle this huge responsibility. Linda plans to make a list of the frequent recommendations she has given in the past and put them into the UDO. Mike suggested meeting with Scott (The Director of the Planning and Transportation Department). Mike believes all we need is a summary from the

planning staff on routine urban developments. However, for developments with site-specific environmental issues (e.g. forest, sinkholes) we should review details and possibly inspect the location and write a memo. If we see a gaps in reports, a member of the EC should address it. Everyone agreed to keep the conversation going.

9. New business:

A. Elections

Sam is the candidate for chair, Matt for vice chair, and Mike for Secretary Treasurer. No one was interested in opposing these candidates. Mike motioned for a vote. Megan seconded.

Carrie Yay
Sam Yay
Matt Yay
Don Yay
Mike Yay
Megan Yay
David Yay
Dedaimia Yay

Unanimously approved. Our new chair, vice chair, and treasurer are Sam Armstrong, Matt Caldie, and Mike Litwin!

*B. Letter of support for ban on polypropylene erosion/turf netting **

This will be pushed back to next month.

10. Commissioner announcements:

Sam has been accepted into the adopt a greenspace program for Bryan Park. He will be working with park staff on various improvements to the park. He hopes to primarily work on removing invasives and replanting with natives. Sam hopes we can get more information on the merger between BCOS and the EC. He hopes we can remain independent. Linda hasn't heard anything about it. David worked for three years for the NYC water supply, and he has received invitations to EPA meetings in Cincinnati on E. Coli. At one of the meetings, they produced a book chapter. David pointed out in this chapter how not all E. coli can make people sick. However, he believes the E. coli coming from septic systems is probably more dangerous to humans. Don said that Matt Flaherty suggested reaching out to your council representatives about your views towards the EC and BCOS merging. Matt mentioned creating more work sheets to educate the public on planting natives. Matt reached out to people at the DNR about the invasive ban in shops. They said the most influential way the EC and members of the public can help is by educating people about the issues with invasive. If customers of all the shops demand natives, they won't have a problem of them being sold in shops. They are starting to see this now.

11. Adjournment:

The meeting was adjourned at 7:32 PM

* Item to be voted on

Next EC meeting: March 17, 2022, 6:00 p.m., TBD

