



**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.

MINUTES

21 June 2018

City Hall—McCloskey Room, 401 North Morton Street

1. Introductions (7:00 - 7:05 p.m.)
 - Present: Ramsay Harik, Mike Litwin, David Parkhurst, Linda Thompson, Morgan Taylor, Erica Walker, Stephen, Matt Caldie
 - Absent: Zoe Need, Andrew Marrs
 - Guests: Sherry Mitchell-Bruker from Friends of Lake Monroe, Melissa Moran from Nature Conservancy
2. Approval of minutes (7:05 - 7:10 p.m.)
 - Nick called for approval of June 21st agenda
 - Morgan motioned and David seconded, agenda was approved.
 - Nick called for approval of May minutes
 - David motioned and Mike seconded, May minutes were approved.
3. Public comment (7:10 - 7:30 p.m.)
 - No public comment.
4. Friends of Lake Monroe; Missions and Goals. Sherry Mitchell-Bruker & Melissa Moran (7:30 - 8:00)
 - Sherry Mitchell-Bruker from Friends of Lake Monroe (FOLM) gave a power point presentation.
 - Talked about Lake Monroe and watershed, issues , priorities and uses.
 - Overview
 - The current capacity of the lake leaves 30 million gallons per day for water supply under drought conditions, Bloomington averages 15 million gallons per day but peak is 23 million gallons per day.
 - Uses
 - Hosts 1 million visitors per year, while providing habitat for wildlife such as fish, otters, muskrats, eagles, and more. Additionally creates an economic benefit to the region.
 - Lake Monroe Watershed
 - Land use make up of Lake Monroe was evaluated by a SPEA class as part of their capstone project. Land use within the watershed is ~80% forested land, ~2%urban, ~8% agricultural land, ~4% herbaceous, and ~5% water.
 - The watershed falls across 3 distinct counties (Monroe, Brown, and Jackson).
 - Concerns within Lake Monroe
 - Blue-green algae
 - Fed via nutrient loading (storm water, agriculture, sewer/septic) and sediment loading (erosion from steep slopes, shoreline and stream bank erosion).
 - Monroe Lake does usually get recreational advisory, not for toxicity but for high count.

- Disinfectant By-Products
 - Link between total organic carbon (from algae and sediment) in Lake Monroe and disinfectant by-products in drinking water pulled from Lake Monroe. For Lake Monroe drinking water, trihalomethanes and haloacetic acids are the by-products of concern. The drinking water was seeing an upward trend in concentration of these by-products, which has since declined due to changes in treatment processes by the CBU. Friends of Lake Monroe wishes to see further reduction by source treatment of nutrient and sediment loading into Lake Monroe itself.
 - Mercury
 - By product from coal fired power plants. USGS published information showing high levels of mercury in Lake Monroe fish, however the species were not ones commonly used for human consumption. Still this poses a problem within the larger food chain especially due to toxicity via biomagnification.
 - Trash and Plastics
 - FOLM is currently working with various groups such as IU researchers to examine the entire plastic pathway and at microplastics.
 - Invasive species
 - Invasives of concern for the lake include silver carp, aquatic plants, and beavers, while native, are invasives due to lack of top predators (IDNR has highlighted this problem).
 - FOLM is hoping to work with aquatic ecologist at IU for aquatic plant invasives.
 - FOLM Next Steps
 - Currently FOLM has succeeded in becoming connected with state and local agencies and organizations, however is looking to expand their ability to connect to everyday individuals.
 - Working on a 319 Grant proposal to obtain funding to collect data, form a watershed plan, and hire a watershed coordinator
 - Asking for the EC's support in obtaining this grant.
 - Next meeting July 25th with Monroe county talking about their UDO update.
- Questions:
 - David: How long have otters been present at the lake and where?
 - Sherry: DNR individuals do not want to share location, but it has been a recent discovery.
 - Erica: Are the publically held properties surrounding the lake currently doing watershed management?
 - Sherry: These properties have been managed more of recreational purposes, so would like to see them doing more in terms of water quality. Specifically the Hoosier National Forest, within the watershed, could do more.
 - Morgan: Have you been able to link problems to particular practices or sources yet?
 - Sherry: We don't have that level of information yet, working with TNC to fund an intern to analyze already existing data sets. Additionally looking for a site to host the Army Corp to monitor the lake.
 - Melissa: One of the things that can come out of this is a more coordinated effort, in terms of understanding who is collecting what information
 - Erica: Knows that CBU has already been working to monitor Blue-green algae
 - Ramsay: Seems like this calls for policy change, what is FOLM doing in terms of policy?
 - Sherry: FOLM has been doing a lot more policy than originally anticipated. This included working on preventing passage of HB1289, which would take away Monroe's ability to regulate logging and mineral extraction. Additionally, FOLM has been very active with other advocacy groups like the Sierra Club and Hoosier Environmental Council. FOLM member, Dave Simcocks, has been very

- active in helping with policy efforts, making multiple trips up to the state capitol.
 - Ramsay: What are some specific environmental policy changes to reduce carbon loading?
 - Sherry: FOLM doesn't have the data right now to pinpoint priority issues and areas to really support a position.
 - Mike: During droughts we only have 30mgd water supply during drought, if true what is happening as lake fill increases and the proposal to allow Indy to get water from Lake Monroe?
 - Sherry: The state does have control over the water control, so Indianapolis looking at Monroe Lake's water is possible, they would have to do an environmental impact analysis. Additionally, you will have reduced water quality if you draw the water too low. This is something to think about with Bloomington's growth and drought, especially when paired with sedimentation. Other things to note is that it is hard to pinpoint shoreline erosion vs larger watershed erosion. Also, Lake Monroe hasn't had a bathymetric map done since it's been built, this is uncommon for lakes in Indiana.
 - David: Can you make a rough guess of pollutants coming from recreational uses vs the watershed as a whole?
 - Sherry: Can't really answer that, don't have the data. This is the reason why we need more data, better data, and taken over a longer period at regular intervals. Additionally there is legacy phosphorous in sediment, which can cause algal blooms from after seasonal turnover.
 - Nick: What FOLM's ask of the EC?
 - Sherry: Biggest ask is in supporting them to obtain matching funds from the 319 grant. If they cannot get a grant, then support in hiring a watershed coordinator.
- Melissa Moran - The Nature Conservancy (TNC) then gave a power point presentation
 - TNC approached the City of Bloomington to see if they would be interested in setting up a waterfund. Bloomington was sought out due to proximity to Brown county hills, which is a strategic conservation area in Indiana. TNC was directed to reach out to FOLM, additionally the strategic conservation area overlaps heavily with Lake Monroe watershed.
 - Waterfunds are part of the TNC's Shared Conservation Agenda. This seeks to achieve the following goals: Protect land and water, tackle climate change, provide food and water sustainably, build healthy cities, and connect people and nature. Waterfunds supports providing water sustainably.
 - Why waterfunds?
 - Protect watershed and restore forests, wetlands, grasslands and agricultural land to provide clean water to cities and to store carbon. Watersheds often cross governance boundaries, so waterfunds create new entity and/or source of funding to provide or facilitate programing towards sustainable watershed management.
 - Examples
 - Quito: pays agricultural practitioners higher in watershed to not cut down trees and sustainably manage land.
 - Edward's Aquifer, San Antonio TX: one county is starting to purchase properties and conserve them through designated waterfund.
 - How they are developed?
 - 5 phase process: feasibility, design (5-year strategic plan), creation, operation, and maturity.
 - This area is Just starting in this process (feasibility stage) and has an already interested set of groups at the table (IDEM, FOLM, CBU, DNR, IU).
- Questions:
 - Morgan: What amount of money would be needed to address first impact?

- Melissa: Not there yet, the initial money would be to do further research to identify these priorities and costs to address these priorities.
- Erin: What is the typical financial makeup for these waterfunds?
 - Melissa: Varies, in San Antonio it is a property tax funding their waterfunds. But could be a tax on products, like beverages. In Bloomington, Il they included the waterfund as a line item in their utility budget. The next steps seek to explore the feasibility and potential for funding of the waterfund.
- Linda: 319 grant comes through IDEM via EPA?
 - Melissa: Yes.
- Erica: Are there any missing stakeholders for this waterfund so far?
 - Melissa: The stakeholder may change in the future as the waterfund planning expands, such as expanding to governance or financial knowledge base, most people at table currently are those that understand conservation practices and water quality.
 - Sherry: We don't have stakeholders from Jackson county, and maybe health department representatives.
- Nick: Have you mostly seen waterfunds within governing bodies or is its own 501(c)3?
 - Melissa: Most examples are their own entity, not sure if 501(c)3, but they are their own organization that oversees how the funding is directed.
- Erica: Could this group establish nutrient loading markets or water markets more upstream in the watershed?
 - Melissa: There is another tool, usually in water scarcity areas, called water markets. This idea is a bit more advanced and would be down the road from where we are currently. However, other things that would be done would be helping private land owners, via incentives or programs to help with forest management or soil health practices as early low hanging fruit.
 - Sherry: State of Indiana's water is poor, we looked into TMDL study with IDNR but didn't get much traction.

5. Discussion from Environmental Commission working groups (A cycle) (8:00 - 8:20 p.m.)

A Cycle

A. ECPC/Planning Commission

- Linda:
 - Plan commission agenda has 3 cases that will not be talked about tonight, as we already talked about them and they had gotten continued to this month's meeting. These are:
 - JB Salvage - not getting city support.
 - Whitehall Associates, an outlot in Whitehall plaza near old Kmart behind Hardy's, the petitioner wants to subdivide the property and build a Freddy's restaurant.
 - Public investment Corp, a large site with lots of sensitive environmental areas near Weimer Rd, ECPC will be talking about and visiting the site soon. This is an issue that went through the PUD process previously years ago, and resulted in highlighting tops of ridges that could be developed but now the plans is to develop along one of these ridges but also run a road through some of the sensitive areas.
 - Chandler's Glenn
 - Site off of 17th St, just east of new 69 section. There is already an apartment complex called Chandler's Glenn near this site. The new development is currently zoned business park due to last Comprehensive Plan and UDO having Vernal Pike slated to be an interchange, but since Vernal is now an overpass the site is a little landlocked for business. The site is approximately 41 acres, with exposed bedrock and some nice wooded section.

- There will be 134 separate buildings, clubhouse with pool, workout room, and computer lounges. There will be 276 units, and 920 bed, all student housing.
 - Nick: not calling it student housing, but rather housing that is affordable by people in community but students will want to live there.
- Issues are that there are some nice wooded area, much doesn't have nice woods but more opportunistic/successional growth, also has sinkholes, spring, and wetlands. There is also a nice big creek with riparian buffer.
- From environmental standpoint, not necessarily bad if they left more sensitive areas off of the development plan.
 - Nick: This site can create a storm water issue.
- No public streets, and want to run own bus system. Which the usage of private bus systems has been an issue for public transportation and the public bus system.
- Goes against BHCP, as the site is located in the highlighted sensitive areas.
- Mike: where does tree canopy come into play?
 - Linda is unsure if it fits with tree canopy ordinance. They are asking to change the PUD and approve plans simultaneously.
- Erica: are these features spread out or more central?
 - There is a place that doesn't have any environmental features, but is straight bedrock (all slabs). Plans for one large detention pond rather than multiple detention ponds across the property.
- ECPC will probably want to go out and see the site in person, didn't say anything about any green buildings.
- Vacant Parcel between Lowe's and Gate's Drive
 - Petitioner is proposing to subdivide lot into two, and only build on the northern portion. Wants to build a Sherwin Williams Paint Store. The plans include two ingress and egresses. Lot has utility easement through it. Not much to talk about other than their potential plans for green building elements. Right now the lot is mainly just turf grass.
- Century Village PUD
 - Site on the corner of E 3rd and 446, currently a little hotel and there was a restaurant and a few office buildings previously. Currently the location is just mowed grass waiting for development. About 5-6 years ago someone had come forward with a plan for the location that never went through. As this was previously looked at, the petitioner is asking for a PUD amendment, plan approval, and to skip the 2nd hearing. Additionally, they want a staff level revision review.
 - This petitioner wants to build student housing, with their own bus system. It would be 3-story town houses with 4 story apartments in the middle of the property, consisting of mix of 1 bedroom and 4 bedrooms. It would include 632 beds and 479 parking spaces. No affordable housing units, plans to just pay into affordable housing fund. Plan would have no public streets, so no recycling pickup.
 - Environmental Issues with the site include a storm water issue and no mention of green building elements.
 - Erica: Is there a detention pond?
 - Linda: No, water would just go to city storm system.
 - Mike: Isn't this in Monroe watershed system?
 - Linda: Yes
- Nick updated on Crescent Drive property vote.

- Couldn't vote no legally, as the vote was for the final PUD plan approval and whether the final plan was close enough to original PUD plan and it was. This was another example of environmental issues vs social justice issues, as a result Nick abstained.
- The petitioners are waiting to build until after bat mating period, highlighting they may know here are bats there. Additionally there is a storm water issue and issue with proximity to creek headwaters.

~~B. Waste/Hazards~~

C. Water

- No meeting this month.
- Two major issues is collaboration with FOLM and input into UDO.

D. BCOS

- Last meeting was mainly focused on Bloomington High Schools' Climate Action next steps, which included Bloomington High School North, Bloomington High School South, and Academy of Science and Entrepreneurship. No discussion of the UDO or SAP yet, but will discuss at later meetings.

B Cycle

~~A. Outreach~~

~~B. ECPC/Planning Commission~~

~~C. Biodiversity~~

~~D. BCOS~~

6. Old business (8:20 - 8:55 p.m.)

A. Mayor's Monarch Pledge update, vote on Nick's introduction

- Mayor will be there at 12:30pm.
- Proclamation was signed already, there were some modifications from what was sent to the Mayor, but what was signed is still good. A press release about the event was sent out last Saturday.
- Nick's presented his intro for BugFest for a vote.
 - David moved to accept, Morgan seconded, unanimous vote of yes.

B. Sustainability Action Plan update

- Mike: Emailed Steph Richards. Was told there they have drafted a few chapters already, which are expected to be sent to working groups on the 3rd week of August.
- David: At the last meeting they came up with some distinct goals for food policy. Those were: Hire city full time employee to deal with food, provide space to vend food, adapt zoning to allow open farms, develop city composting program and make the composted materials available to public, conduct additional research on food issues, and connect schools and children to their food.

C. UDO updates & status of topic teams

- David: If it is not now a law, all properties that are rented or leased residential should be required to be checked for Radon every 10 years and have information shared with renter, at landlord's expense.
 - Can get free radon test kits from the county health department.

E. Tabling at Farmers' Market and other events/ inventory of supplies

- Matt: Should we set a schedule?
 - Nick and Morgan can do the 7th of July - Set this date as first day of tabling. Those tabling can come in on Friday to get materials.

- Materials
 - Nick: We should have a map of the connectivity plan at our table.
 - Linda: We should have a copy of the BHCP and BEAP, but also need something exciting too not just written materials.
 - Erica: We should make crafts of insects. Would need to purchase clothespins, crayola markers, pipe cleaners, colored paper, glue, tongue depressor, googly eyes to attract kids to make monarch butterflies.

7. New business (8:55 - 9:00)

A. Summer month's representative for Tree Commission

- David will do it, and will take his wife who is a Forester.

B. County Environmental Commission

- Need an EC person to go to County Environmental Commission, this time currently overlaps with ERAC.

8. Commissioner announcements (9:00 - 9:05 p.m.)

- David: Just sent in application for board of directors for Bloomingfood, if you are members please vote for me.
- Linda: City has contracted with Green Camino to compost at city hall. Also, attended tree commission meeting yesterday, discussed tree protection during construction and have been sent further information about protection. In regard to lack of removal of Bradford pears, right now the priority is ash tree removal due to Emerald Ash Borer. The proposed tree study has been postponed to October. The city sold 190 tulip trees to public, which included a watering bucket. The EC may want to buy these watering buckets to hold prizes for next year's Eco-Heroes.
- Nick: Wife graduated from Brown, was impressed by Martha's vineyard and the East Coast in general in how they seemed to compost everything.

9. Adjournment

Other meeting times

- A. Environmental Commission: 19 July, 7:00 p.m., McCloskey Room, City Hall
- B. EC Planning Committee: 27 June, 11 July, 4:00 p.m., Lemon Room, City Hall
- C. Tree Commission: 18 July, 9:30 a.m., Bryan Park
- D. BCOS meeting: 10 July, 6:00 p.m., McCloskey Room
- E. MCEC Com.: 11 July, 5:30 p.m., Nat U Hill Room, Courthouse
- F. ERAC: 8 August, 4:30 p.m., TBD