

# FLATHEAD BASIN COMMISSION

VIRTUAL ZOOM MEETING

September 23, 2020

## AGENDA

9:30 AM	<b>Welcome, Introductions, Confirm Quorum</b>	Rich Janssen, CSKT (Chair)
9:40 AM	<b>ACTION: Discussion/approval of DRAFT 7/8/20 Minutes</b>	Kate Wilson, FBC staff
9:45 AM	<b>What Have Staff Been Up To?</b> Activities/Events; Budget and Grants; Projects; Website	Kate Wilson; Cassidy Bender, FBC staff
	<b>ACTION: 2020 Sponsorships</b>	
	<b>ACTION: Bylaw Amendments</b>	
10:20 AM	<b>What Should We Expect From the 2021 Legislative Session?</b> Planning for the Upcoming Session; Agency/Legislature Updates	Mark Bostrom, DNRC Toni Henneman, Legislative Services ( <i>Invited</i> )
10:40 AM	<b>How Is the Stormwater Project Going?</b> Presentation of Work Plan for Stormwater Project	Casey Lewis, City of Kalispell; Emilie Henry, Big Sky Watershed Corps; Kate Wilson
11:05 AM	<b>How is the Onsite Wastewater Treatment Committee Progressing?</b> Committee Approach & Timeline. Legislative Connections.	Mike Koopal, Whitefish Lake Institute/FBC; Ed Lieser, FBC Vice Chair; Kate Wilson
11:15 AM	<b>Synthetic DNA Overview &amp; Project Concept</b>	Dr. Walter, Cornell University ( <i>invited</i> )
11:40 AM	<b>Education &amp; Outreach Committee</b> Committee Approach & Deliverables. Next Steps.	Lech Naumovich, Casey Lewis and Kate Wilson
11:50 AM	<b>ELECTION: Chair/Vice Chair</b>	Kate Wilson
11:55 AM	<b>Public Comment</b>	Rich Janssen
12:00 PM	<b>Wrap Up &amp; Adjournment</b> Next Meeting Dates/Locations, Doodle Poll Results 2021: January 20, March 31, August 25	Rich Janssen; Kate Wilson

### \*ACTION ITEMS INDICATED IN BLUE

***We promote participation!*** All Flathead Basin Commission (FBC) meetings are open to the public and stakeholders. To participate in the upcoming virtual meeting, or to request special accommodations, please contact Cassidy Bender ([cassidy.bender@mt.gov](mailto:cassidy.bender@mt.gov) or 406-542-5886) as soon as possible before the meeting date.

## MEETING MINUTES

<b>Meeting/ Project Name:</b>	Flathead Basin Commission		
<b>Date of Meeting:</b>	Sept 23rd, 2020	<b>Time:</b>	9:30am-12pm
<b>Minutes Prepared By:</b>	Cassidy Bender	<b>Location:</b>	Virtual-Zoom/Call in

### List of Acronyms

AIS	Aquatic invasive species	FBC	Flathead Basin Commission
BOR	US Bureau of Reclamation	FLBS	Flathead Lake Biological Station
BPA	Bonneville Power Administration	FWP	Montana Fish, Wildlife & Parks
BSWC	Big Sky Watershed Corps (AmeriCorps program)	GNP	Glacier National Park
CEMIST	Central Eastern MT Invasive Species Team	MCWD	Missoula County Weed District
CFC	Clark Fork Coalition	NPS	National Park Service
CRB	Columbia River Basin	NRCS	Natural Resource Conservation Service
CRC	Clearwater Resource Council	UC <sup>3</sup>	Upper Columbia Conservation Commission
CSKT	Confederated Salish & Kootenai Tribes	UCLN	Upper Columbia Lakes Network
DEQ	Department of Environmental Quality	USACE	US Army Corps of Engineers
DNRC	Dept. of Natural Resources & Conservation	USFS	US Forest Service
eDNA	Environmental DNA	USFWS	US Fish & Wildlife Service
E & O	Education & Outreach	WLI	Whitefish Lake Institute
EPA	US Environmental Protection Agency	WRDA	Water Resources Development Act
EQC	Environmental Quality Council (Interim)	WRP	Western Regional Panel

### 1. Welcome and Introductions

Rich Janssen (Chair)	Welcome. Rich opened the meeting. Confirmed quorum present (for voting purposes).
Introductions (Roundtable)	Each participant introduced themselves including name, location and organization/interest that they are representing.

### 2. Attendees

FBC (voting members underlined): Rich Janssen (CSKT), Mike Koopal (Whitefish Lake Institute/UC<sup>3</sup>), Randy Brodehl (Flathead County Commission), Mark Bostrom (DNRC Helena), Jack Potter (Governor-appointed member), Myla Kelly (DEQ), Kurt Steele (USFS), Kate Wilson (DNRC/FBC & UC<sup>3</sup> Commission Administrator), Ed Lieser (Flathead Basin Commission), Kathy Olsen (DNRC Kalispell), Casey Lewis (City of Kalispell), Cassidy Bender (DNRC/FBC & UC<sup>3</sup> Commission Coordinator), Steve Frye (Governor Appointed), Jim Simpson (Lake County Conservation District), Jim Williams (Montana FWP), Mark Reller (BPA), Dave Stipe (Lake County Commissioner), Lech Naumovich (Flathead Conservation District), Jason Gildea (EPA)

Absent: Jasmine Courville-Brown; Patrick Holmes, Dennis Philmon, Kurt Steele, Jeff Mow

Public/Other: Tom Bansak (FLBS), Emilie Henry (BSWC, City of Kalispell), Valerie Kurth (MT DNRC), Sam Bourett (FWP), Toni Henneman (MT Legislative Services), Dr. Todd Walter (Cornell), Aaron Losing (Kalispell WWTP), Mikaela Richardson (FCD BSWC), Jadin Doerr (Little Bitterroot Lake Association LEAP), Onno Wieringa (Flathead Citizen), Breanna Carr (Morrison-Mairele), Hope Stockwell, Tim Burton (MT Cities and Towns), Rachel Malison (FLBS)

### 3. Agenda and Notes, Decisions, Issues

Presenter	Topic/Discussion
Kate Wilson, Commission Administrator  <b>Approval of            Minutes</b>	<ul style="list-style-type: none"> <li>• <u>Motion</u> to approve minutes from July 28<sup>th</sup>, 2020 meeting (Ed Lieser) Second (Randy Brodehl). All in favor. <i>Motion passes.</i></li> <li>• Overview of Agenda: Minutes, Staff Report (Budget, Grants, Projects), Agency Updates/Legislative Planning, Stormwater Project, Onsite Wastewater Treatment Committee, Synthetic DNA project, E&amp;O Committee updates.</li> </ul>
Kate Wilson, Commission Administrator  <b>Staff            updates/Budgets</b>	<p><b>Staff Update:</b></p> <ul style="list-style-type: none"> <li>• Kate and Cassidy split their time 50/50 with FBC and UC<sup>3</sup> both working (mostly) remotely due to COVID-19.</li> <li>• Notable staff activities:               <ul style="list-style-type: none"> <li>○ Meeting follow up and planning;</li> <li>○ Executive Committee planning and participation;</li> <li>○ Grant &amp; Budget management (writing/reporting/tracking) – EPA grant application submitted;</li> <li>○ Monitoring Flathead Basin natural resource issues;</li> <li>○ NEW! Flathead Basin Septic Leachate Partnership;</li> <li>○ support septic leachate committee and tech subcommittee support;</li> <li>○ support stormwater project with City of Kalispell shared Big Sky Watershed member;</li> <li>○ BSWC projects &amp; planning (application fo2 2021 submitted;</li> <li>○ support UC<sup>3</sup> and FWP on AIS (50% of time);</li> <li>○ follow legislative committees on topics of interest including the Local Government Interim Committee;</li> <li>○ Crown Managers Partnership steering committee (represent both Commissions);</li> <li>○ North American Invasive Species Management Association virtual conference Oct 6-8<sup>th</sup> (board member, conference chair);</li> <li>○ PNWER (co-chair of invasive species working group);</li> <li>○ Western Regional Panel (chair of Fire AIS protocol committee);</li> <li>○ BC Columbia River Basin Steering Committee (member);</li> <li>○ Pend Oreille Basin Commission (Ex-officio, MT upstream rep);</li> <li>○ County Assist Team (CAT) Public Information Officer &amp; Liaison Officer;</li> <li>○ NEW! Kate is attending graduate school- MPA Certificate</li> </ul> </li> <li>• Upcoming Events:               <ul style="list-style-type: none"> <li>○ North American Invasive Species Management Association (NAISMA)-Oct 6-8 (virtual)</li> <li>○ Business of Outdoor Recreation Summit- Oct 10-13<sup>th</sup> (virtual)</li> <li>○ MWCC Stream to Summit- Oct 13-15<sup>th</sup> (virtual)</li> <li>○ Pend Oreille Basin Commission- Oct 20<sup>th</sup> (virtual)</li> <li>○ UC<sup>3</sup> Fall Meeting- Nov 4<sup>th</sup> (virtual)</li> <li>○ Local Government Interim Committee Meeting- Nov? (virtual/Helena)</li> <li>○ Environmental Quality Council- Nov? (virtual/Helena)</li> <li>○ North American Lake Management Society- Nov 16-20<sup>th</sup> (virtual)</li> <li>○ Columbia River Basin (AIS)- Dec 2-3<sup>rd</sup> (virtual)</li> <li>○ Montana Legislative Session- Jan-April 2021</li> <li>○ Pacific Northwest Economic Region (PNWER)- Winter Economic Summit (Nov); Annual Summit rescheduled for August 2021: Big Sky, MT</li> </ul> </li> </ul> <p><b>Budget &amp; Finances:</b></p> <ul style="list-style-type: none"> <li>• FY20 Personnel: <b>expended \$12,925/\$77,000</b></li> </ul>

Mark Bostrom,  
DNRC

- FY20 Operating: **expended \$9,890/\$75,000**
  - \$20,000 (annual base budget) + \$20,000 (addition One-Time-Only, OTO)
  - **\$20,000 (accrued to RDG) + \$15,000 (accrued to Windfall)**
  - Expended on RDG contract, stormwater project (data plan), member travel, website updates, sponsorships
  - Increase in balance: Natural Resource Operating (NRO) account shortfall (less paid for than anticipated out of FBC FY20 funds)
  - Adds \$35,000 to FY21 budget
    - \$20,000 accrued to RDG contract (septic leachate risk map/GIS)
    - \$15,000 accrued to Windfall contract (water quality campaign, website, etc.)

**Sources of Funding FY21**

- Natural Resources Operating Fund FY21:
  - **\$40,000**- base budget & OTO requested to be permanent (operating budget)
  - **\$77,000**- personal services (staff salary, benefits- split with UC<sup>3</sup>)
- Natural Resources Operating Fund FY20:
  - **\$20,000**- accrual from FY20 to RDG contract
  - **\$15,000**- accrual from FY20 to Windfall contract
  - Accrual is a carry forward of money to the next year, the spendable amount is increased but does not change the base budget amount.
- Federal: **EPA Multipurpose State & Tribal Assistance Grants**
  - **\$12,217/\$51,000**- EPA grant *spent* (stormwater project, 2 years)
  - **\$26,000**- *Pending* EPA grant (septic leachate GIS mapping contract)

**Proposed (Revised) FY21 Budget:**

## FY21 Proposed (Revised) Budget

FBC FY20 LINE ITEM BUDGET		
AMOUNT RECOMMENDED	CATEGORY	NOTES
PREVIOUS: \$15,000 W/Accruals: \$35,000	Septic Leachate contract (to date), study and/or water quality monitoring to verify model, report generation	May include: 1) GIS monitoring contract (\$24,800 value); 2) augment synthetic DNA pilot study to validate model results (Whitefish Lake, Echo Lake TBD); 3) build layer of state-owned/managed lands and facilities; 4) additional studies (drones, thermal studies, nearshore monitoring, etc.); 5) report writing/formatting/design. <i>Augment EPA grant (pending).</i>
PREVIOUS: \$8,000 W/Accruals \$23,000	Education & outreach, Water Quality Campaign, Biennial Report, outreach materials	Includes: 1) Development of Water Quality campaign and associated materials; 2) Materials for FBC tabling, events, activities; 3) Building new website at flatheadbasincommission.mt.gov (vs. .org); 4) Biennial Report – 2019/2020 due to Governor’s Office by Fall 2020
PREVIOUS: \$3,000 NEW: \$2,000	Stormwater Project (2 <sup>nd</sup> year)	May include: dataplan for tablet, additional sampling, ½ of BSWC position, professional development, etc. <i>Augment EPA grant for 2<sup>nd</sup> year of project.</i>
PREVIOUS: \$5,000 NEW: \$2,000	Member travel and meetings	Includes member travel, facility fees and refreshments for meetings
PREVIOUS: \$5,000 NEW: \$8,500	Conference/meeting sponsorships	See sponsorship opportunities in packet. Prioritize MT-based events. Examples: MWCC Stream to Summit, Crown Managers Partnership, MT Lakes Conference, Stormwater Conference, etc.
\$2,000 (same)	Staff Supplies/Travel	E.g. desk, computer, cell phone, printing, training, some travel on FBC-related business
PREVIOUS: \$2,000 NEW: \$2,500	Other/Contingency funds	Associated project costs or materials as needed
\$40,000 W/Accruals: \$75,000	<b>TOTAL OPERATING BUDGET</b>	Includes \$35,000 accrued from savings (personnel/operating) in FY20

**Proposed Sponsorships: FY21**

	<ul style="list-style-type: none"> <li>• See Executive Committee’s sponsorship prioritization in packet. <ul style="list-style-type: none"> <li>○ <b>\$1,000-</b> MWCC Stream to Summit (virtual conference, committed)</li> <li>○ <b>\$1,500-</b> North American Lake Management Society Conference</li> <li>○ <b>\$2,750-</b> Montana Stormwater Conference (Gold)- Missoula, May 2021</li> <li>○ <b>\$3,250-</b> Crown Managers Partnership (annual)- Steering Committee</li> <li>○ <b>\$8,500 TOTAL</b> in sponsorships FY21</li> </ul> </li> <li>• We have put priority into Montana based events/conferences or international conferences that are being held in Montana.</li> <li>• Crown Managers Partnership counts on agency contributions for funding, staff sits on steering committee, we support with projects as well.</li> <li>• <u>Motion</u> to approve revised FY21 budget (Casey Lewis). Second (Lech Naumovich). All in favor. <i>Motion passes.</i></li> </ul> <p><b>Bylaw amendments:</b></p> <ul style="list-style-type: none"> <li>• See meeting packet for specific by law changes. Main changes were to clean up confusing language of IV: Officers and Duties, item D. <ul style="list-style-type: none"> <li>○ New language: “The Commission may, with the agreement of the Chair and Vice Chair, vote to renew or extend the terms of either or both, for an additional two-year term.”</li> </ul> </li> <li>• Executive committee has oversight authority including expenditure of funds and project progression, anyone can attend bi-weekly Executive Committee meetings (every other Tuesday at 10am).</li> <li>• Addition to bylaws: <b>75-7-308. Cooperation with other agencies and organizations.</b> “To fulfill its duties, the commission shall develop and maintain cooperative programs with federal, state, provincial, tribal, and local agencies or organizations that are responsible for natural resource management and monitoring in the Flathead basin. Participating federal and provincial agencies must be requested to provide adequate funds to participate on the commission and to monitor resources within their areas of responsibility.”</li> <li>• Existing language on meeting locations: MCA 75-7-304(7) FBC is, "to meet at least semiannually within the Flathead basin, alternating the meeting site between the cities of Kalispell and Polson."</li> <li>• <u>Motion</u> to approve amended bylaws (Dave Stipe). Second (Steve Frye). All in favor. <i>Motion passes.</i></li> </ul>
<p>Mark Bostrom, DNRC</p> <p><b>Agency &amp; Legislative Updates</b></p>	<p><b>Agency Updates and Discussion</b></p> <ul style="list-style-type: none"> <li>• DNRC is asking for the one-time-only \$20,000 per year to be made permanent.</li> <li>• We are seeking additional monitoring authority in the state revolving fund.</li> <li>• Found issue in cases were the federal government continue to operate on resolutions regarding the assistance grant revolving fund for water systems and water treatment plants. The lack of certainty of the state assistance grant arriving at a certain time tends to disrupt construction timelines of big projects. We are looking for the ability to write general obligations bonds to keep construction going, which will be paid back by the city, knowing the federal money will come through eventually.</li> <li>• DEQ is the lead agency for engineering design and DNRC operates the financial arm of the state revolving program.</li> <li>• Debt issuance for irrigation districts and counties, irrigation law is quite old (1930s). DNRC is working on cleaning up the law so irrigation districts have ability to improve their infrastructure through the renewable resource grant program.</li> <li>• Other CARDD legislative bills are UC<sup>3</sup> and the MISC:</li> </ul>

Toni Henneman,  
Legislative Services  
Division

- UC<sup>3</sup> legislative committee has taken up findings from law review. Bigger issue is that FWP do not have explicit authority for aquatic plants as no real AIS list exists like the noxious weed list. This agency bill is requesting the creation of an AIS list.
- The other two legislative items will not be agency bills, but will may be carried by legislators from UC<sup>3</sup>
  - 1) Pull the plug rule
  - 2) Increase ticket amount for inspection station drive-bys
- Natural Resource tax revenues have seen a long steady decline in the coal severance tax revenues which conservation districts are very dependent on. We have seen a soft revenue collection on the oil and gas tax (oil war between Saudi Arabi and Russia). Soft revenue collections in the mining tax as well which feeds into natural resource ops and projects account. We have been able to take those shortfalls internally as much as possible so outside forces (CDS and attachments) don't have to take the brunt of it. This will continue to be a topic in the next session
- Do you expect to see the coal severance tax fund being touched this session? Hopefully not the trust as that is the core of many things. Several coal tax bonds depend on that trust being whole, don't see it being a target.
- The spendable account funds government, conservation districts, and the library. Distribution to spendable portion was set in stone in a recent previous session that gave a percent of allocation to CDS and libraries. Any legislature can change previous legislature so that is still unknown.

#### **Local Government Interim Committee Updates**

- Committee wrapped up work Sept 9<sup>th</sup>. Tasked with SJ3 study to look at alternative septic systems. Expanded the scope of the study with issues on old or failing septic systems.
- Mike and Ed presented on our Onsite Wastewater Treatment Committee's progress and projects.
- Two conclusions:
  - 1) Send a letter to DNRC requesting expanded grant opportunities through the grant program to replace septic systems. Funding opportunities for landowners for septic replacement is limited, bolster this and implement education and outreach to let landowners knows.
  - 2)PD8: Request draft legislation looking at requiring DEQ to mandate a regular schedule to review experimental systems. Every 2 years DEQ will have to inspect systems that were granted deviation. Goal is to see which experimental systems can work and can be moved to approved systems. Draft is on the committee website and linked in the final report of SJ3.
- Director Tubbs received the letter and are deciding how they will respond.
  - There was a prior new proposal in the executive planning process requesting a \$200,000 general fund bump to go toward septic issue and RDG program to establish a specific septic grant program using the general fund. This was denied.
  - Other options: HB6 has smaller line items that are typically renewable resource planning grant projects, watershed grants, irrigation development grants, etc. We could identify a specific one for septic systems rather than running through the private grant program that could be used for various things. If it looks like there are enough funds to support that we could write that into the HB6, or we could amend in the legislature.
- Multiple individual legislators expressed interest in individual legislation.
- The session this year will be interesting with some big topics. Waiting to see with leadership changes after the election.
- Improving digital services to be able to broadcast sessions and make every meeting zoom capable.

	<ul style="list-style-type: none"> <li>• Presentation about Lewis and Clark Septic Inspection and Maintenance Program to Local Gov Summary: SJ3 final report has a piece about this topic as well. They presented on how they set up the program, what it does, and any successes or failures. Committee didn't act on this presentation it was more informational, presenting an option that could be implemented at the local level. There was some public comment against point of sale inspections.</li> </ul>
<p>Emilie Henry, Big Sky Watershed Corps; Kate Wilson</p> <p><b>Big Sky Watershed Corps Member Activities &amp; Outreach Project</b></p>	<p><b>Introduction:</b></p> <ul style="list-style-type: none"> <li>• Our BSWC member, Emilie's, position is funded primarily by the EPA grant. Grant Components (2020-2022) <ul style="list-style-type: none"> <li>○ Big Sky Watershed Corps (partial, 2 years)</li> <li>○ Stormwater Monitoring &amp; Inventory Project</li> <li>○ Education &amp; Outreach: Rain Garden Initiative; Adopt-a-Drain program; Flathead watershed/stormwater curriculum; organize local river clean up event(s)</li> <li>○ Utilize City of Kalispell as a Pilot for Dry-Weather Inspection of Outfalls</li> <li>○ Casey: Emilie has been awesome, has learned so much and taken the project to new heights and gotten great results.</li> </ul> </li> </ul> <p><b>Project Updates:</b></p> <ul style="list-style-type: none"> <li>• Gathering stormwater infrastructure data for the urban and semi urban areas in the Flathead Basin.</li> <li>• Data Collection Campaign: <ul style="list-style-type: none"> <li>○ Solicited volunteers to locate and characterize catch basins, storm manholes, and outfalls in Polson in August.</li> <li>○ Figuring out how catch basins are connected and to which outfalls they are running.</li> <li>○ Digitized and added to stormwater inventory.</li> <li>○ One of the volunteers was a Polson City commissioner and was very excited to encourage the community to use this data now that they have it.</li> <li>○ It was a low-cost awesome event and has potential to be a reoccurring effort.</li> <li>○ Got great press on this event, see NBC Montana article <a href="#">here</a>.</li> </ul> </li> <li>• Monitoring, Inspections, &amp; Sampling: <ul style="list-style-type: none"> <li>○ Performed dry-weather outfall inspections on 20 sites. Method could be implemented Basin wide.</li> <li>○ Collected one sample in the beginning of May.</li> <li>○ Sampling the first flush during daylight hours was difficult and very rare- will likely be difficult to get the 4 samples before November.</li> <li>○ May have to change the methodology to get these samples safely. Even if we must tweak the methods, we can still see what the weather was like during these events and interpret the data appropriately.</li> <li>○ Created weather tracker to document weather in Kalispell, Whitefish, and Columbia Falls</li> </ul> </li> <li>• Rain Garden Initiative: Working with the Flathead Conservation District <ul style="list-style-type: none"> <li>○ Created resources to help homeowners plan their own gardens, including pre-made designs and native plants list</li> <li>○ Have been working closely with homeowners to plan, design, and build rain gardens in Flathead County.</li> <li>○ 5 completed so far and are expecting 7 more to go in this fall. 2 webinars were hosted this summer to educate on the rain gardens implementation: <a href="#">watch here</a>.</li> <li>○ Provide residents with a fixed amount of funding toward native plants to take off the financial burden on homeowners. FCD received a 319 grant to continue to supplement funding for projects like these.</li> </ul> </li> </ul>

- View two news articles on the Flathead Rain Garden Initiative from [NBC Montana](#) and the [Flathead Beacon](#).
- Stormwater Inventory- Locations within the basin that we currently have infrastructure data for.
  - Whitefish data: catch basins, outfalls, and manholes. Symbolized by ownership, direction of flow included. Individual drainage basins that drain to associated outfall.
  - Kalispell data: massive data set with similar information
  - Evergreen does not have a city owned sewer system, there are some private stormwater systems and dry wells. Collected data using same methodology from the Polson volunteer event.
  - Bigfork: data set provided.
  - Lakeside: does not have city owned stormwater system, data was collected with FCD BSWC member of private systems.
  - Polson: Data collected from volunteers and supplemented from former engineers with the City of Polson.
  - Ronan: data for Ronan was provided by engineering consultations.
- Conclusions:
  - Became very clear that ownership is variable across the basin. Some areas are only state- and privately-owned infrastructure. Some areas have no preemptive maintenance plan causing them to be reactive instead of proactive. Some areas have older or private systems that do not have data from the implementation of those systems and therefore have no maintenance plan either.
  - Columbia Falls are currently digitizing their data.
  - MDT owned infrastructure is another source to tap into.
  - This is meant to be a dynamic tool rather than a static snapshot in time. We do not want this data to be put on a shelf until it is obsolete. Hope is that this data is used and expanded in years to come.
- Outfall Prioritization Ranking:
  - Ranked according to drainage basin area.
  - Will get into specific pollutants and land use in Phase 2. Phase 1 is broader, focusing on impairment classifications and rankings.
  - 11 high priority areas were identified: 7 in Kalispell, 3 in Whitefish, 1 in Polson
  - Major conclusions:
    - It was difficult to compare with differences in ownership, maintenance, and documentation.
    - Would like to add in other parameters that would affect the potential for pollution like density of septic systems in the area.
- Recommendations:
  - Additional data will polish existing rankings and will allow to include additional parameters (rate of filtration, land use, pollutants, etc.).
  - Create a technical sub-committee to iron out these parameters. Similar body to the technical septic committee would be extremely helpful in advising the continuation of prioritization rankings.
  - She'll be back for 2021: Phase 2!

**Discussion/Questions:**

- Rail spills and possible spills from industry would be great to include, curious if data has been shared with disaster and emergency services so they have in case of emergencies. Good idea as we are hoping to have a rail safety panel in a future meeting.



	<ul style="list-style-type: none"> <li>• Dr. Walter: Emilie is spot on with the importance of updating the data set, things are changing all the time and we would hate to have to go back and update things again. Important to find people that will take this over and keep this information up to date.</li> <li>• Emilie: Will be creating a story map as an easily updatable tool that everyone can collaborate on within the basin</li> <li>• Technical Committee question- we have a tech for septic leachate effort, do we form multiple committees, or should we have more of a long standing tech committee that would be fluid and bring in/out people but maintain a chair that would provide consistency over time? <ul style="list-style-type: none"> <li>○ Kathy: Should be one committee, people can come in and out as the topic changes. But a mutual set of people would be most efficient.</li> <li>○ Mike: We could develop a broader base with that tech subcommittee. As we move through different subjects the chair can reach out to other experts to include.</li> <li>○ Creating committees is not in the bylaws so we are just operating as a majority vote to create/continue committees. Executive committee can talk this over separately to flesh out the idea of a tech subcommittee.</li> <li>○ Steve: Charter of sorts that lays out the objectives and expectations for the committee, so they have direction and some flexibility. On-going water quality committee, whether that should be a standalone committee or folded into the tech subcommittee.</li> </ul> </li> <li>• <b>ACTION: Add creation of a standing technical subcommittee for various projects to the next executive committee agenda.</b></li> <li>• Steve: Exceptional piece of work to get us data. It is important to know how different municipalities treat stormwater in terms of policies/procedures and to identify if there is consistency in the management/maintenance regimes. Huge benefits of Emilie’s work to demonstrate the importance of the cumulative effects of sources of potential pollution to our waterbodies.</li> <li>• Mark: Sharing with DES, thinking about how to most effectively use Emilie’s work. When windfall completes the website is there potential that we can deploy some of these GIS products to the FBC website so we can point to that instead of distributing to all these different parties? <ul style="list-style-type: none"> <li>○ Possibly link up with the Flathead County GIS website to distribute this information through that avenue as well.</li> </ul> </li> <li>• Project is timely with where we are with development as a basin with talk about watershed approaches toward stormwater and water quality, we have potential to do things differently than they were done in other areas. This information has potential to make impacts to the future of our basin/water quality.</li> <li>• Dr. Walter: The east coast did not keep track of things as they were built out and they are having to go back and redo things now.</li> </ul>
<p>Ed Lieser, FBC Vice Chair; Mike Koopal, Whitefish Lake Institute/FBC; Kate Wilson</p> <p><b>Onsite Wastewater Treatment Committee updates</b></p>	<p><b>Onsite Wastewater Treatment Committee Update (Ed Lieser)</b></p> <ul style="list-style-type: none"> <li>• Participation: state, municipal, advocacy/lobbyists, concerned citizens (26+)</li> <li>• Previous Meetings: Dec 18<sup>th</sup>, Feb 20<sup>th</sup>, April 2<sup>nd</sup>, May 29<sup>th</sup>, July 1<sup>st</sup></li> <li>• Data Needs: GIS/Mapping- risk/vulnerability map; potential verification of model/monitoring</li> <li>• Meet roughly monthly and we identified data needs early on. Have entered a 2-year contract through the RFP process for a GIS mapping project with River Design Group.</li> <li>• Status Update: <ul style="list-style-type: none"> <li>○ Applied for EPA grant for \$26k to fund synthetic DNA study (Dr. Todd Walter)</li> <li>○ Formed Technical Subcommittee to discuss/recommend path forward.</li> </ul> </li> </ul>

- GIS/Mapping project, phase 2 (2020-2021): Southern end of lake- no electronic data, new method for that portion of the model.
- Local Government Interim Committee presentation 7/15
- Annotated bibliography of Montana research/studies
- State lands/infrastructure inventory (& associated septic/wastewater policies)
- Committee Report with Recommendations.

**Technical Subcommittee Update (Mike Koopal)**

- GIS risk assessment model is currently underway. We are having difficulties getting the data for Lake County & CSKT and are currently working through how to deal with this.
- Staff is working on an annotated bibliography for water quality studies/research in the Flathead Basin, greater Montana, and beyond.
- Committee is looking to additional studies that can help describe information here in the basin: remote sensing imagery, eDNA, and synthetic DNA (Dr. Walter).
- Lake Mary Ronan does not have septic information because it is in Lake County.
- We have settled on Whitefish Lake for synthetic DNA study for multiple reasons:
  - 1) WLI did a study back in 2011-2012 that created a risk assessment map and RDG data correlates with that risk assessment map.
  - 2) We have more specific data on Whitefish Lake than most other waterbodies in the basin.
  - WLI (pro-bono) can do the field investigation here in MT and then ship the samples to Dr. Walter on the east coast.

**Synthetic DNA Overview & Project Concept (Dr. Todd Walter, Cornell University)**

- Nonpoint Source Challenge: pollution flows to waterways, we try to see where it comes from but it's coming from everywhere. There are various tracer options, but challenges arise with limited number of uniquely different tracers and some tracer compounds already being abundant in the environment, etc. Using synthetic DNA provides a compound that has lots of individual tracers that can be distinguished from one another in the landscape.
- Crash Course in DNA:
  - 4 chemical compounds that distinguish 1 piece of DNA from another (base pairs)
  - Base pairs: A, T, C, G are all different bandwidths in the bar code which make the bar code distinguishable from any another one.
  - Human genome: ~3 million base pairs
  - Smallest known genome: ~600,000 base pairs
  - We use ~100 bases= 1.6 + 60-zeros of unique combinations.
- How does it work: DNA in aquatic environments does not last that long (~month)? We wrap them in a biodegradable plastic sphere to protect it from the environment (smaller than microplastics).
- The size, surface, properties, density, and degradation rate of the microsphere can be controlled during fabrication.
- Because we use DNA to label or tag our tracers, we can make nearly limitless uniquely distinguishable tracers with identical transport properties.
- The tracers can be placed at different places in the landscaper (flushing down the toilets of many residents). Then water samples are collected at the watershed outlet. waterbody and collect water samples within an established time frame. Samples are analyzed on qPCR to determine which traces were in the water sample and their abundance. The results are used to interpret the hydrologic connections between the landscape and the stream.
- Skeptical if it would work so they started with experiments small (6 inches tall, 6 feet, etc.) Upscaled to rivers and streams (.5 mile to a mile long) Then went to an airplane

	<p>crash site in Sweden to run test on how fast the jet fuel would run into the glacier (kilometer between test sites and tracer implementation).</p> <p><b>Questions/Comments:</b></p> <ul style="list-style-type: none"> <li>• The assumption is that the tracers will move through the soil similarly to the pollutants that we are concerned about (phosphorous and nitrogen). Level 2 systems filter pollutants. Is this true? <ul style="list-style-type: none"> <li>○ They move through the soil as bacteria does, unless there is a UV system that is killing bacteria the tracer would move get through and pollutants wouldn't. Transformations can be made to some pollutions that tracers would not be affected by. Tracers are not going to move in as great of abundance as nitrogen does and they would move faster.</li> </ul> </li> <li>• Tech subcommittee getting together to work out scope of work details. We received the EPA grant that will be the funding this project.</li> </ul>
<p>Kate Wilson;</p> <p>Co-Chairs: Lech Naumovich; Casey Lewis</p> <p><b>Education &amp; Outreach Committee</b></p>	<p><b>Education &amp; Outreach Committee</b></p> <ul style="list-style-type: none"> <li>• We had steering committee meeting with co-chairs last week. Setting committee up a little differently regarding the Water Quality campaign. Concept: work with partners in the basin that do similar work to get feedback/ideas to implement a large-scale basin wide water quality campaign that could be an umbrella to the different issues we are seeing in the basin.</li> </ul> <p><b>Status/Objectives:</b></p> <ul style="list-style-type: none"> <li>• Convene stakeholder team to develop water quality campaign for Flathead Basin (project) <ul style="list-style-type: none"> <li>○ Solicit buy-in for concept</li> <li>○ Nov 2020- partner meeting to set goals and timelines</li> <li>○ Campaign logo/look &amp; feel/materials would be available to all partners to use free of charge</li> <li>○ Increase consistency and effectiveness of messaging</li> <li>○ Build respect and conservation attitudes</li> <li>○ Change problematic behaviors</li> <li>○ Address multiple water quality objectives and topics</li> </ul> </li> <li>• Support efforts to build new website</li> <li>• Support efforts to develop new education and outreach materials</li> <li>• <b>ACTION: Send FBC E&amp;O meeting invite/introduction email to water quality partners in the basin.</b></li> </ul> <p><b>Discussion:</b></p> <ul style="list-style-type: none"> <li>• Will develop scope/mission to have the most contact points in which everyone should feel comfortable providing suggestions and insight to use E&amp;O strategically.</li> <li>• Long list of folks to reach out to, if you have ideas or suggestions let us know.</li> <li>• Basin wide campaign, FBC website would be the home where materials could be downloaded and used basin wide from other agencies.</li> </ul>
<p><b>Commission Chair/Vice Chair Election</b></p>	<ul style="list-style-type: none"> <li>• Rich Janssen (Chair)- We are doing some amazing and new things I am excited about. I would like the opportunity to continue for at least two years to continue these important projects. Thank you for the opportunity.</li> <li>• Ed Lieser (Vice-Chair): It is an honor to help in anyway, I am dedicated to the FBC mission and am truly excited about work with the stormwater and septic leachate group. It has been great working with the staff and the executive committee functions very well. I will do everything I can to help move the Flathead Basin Commission forward.</li> <li>• Election options: renew both chairs for a two-year term or we can move forward with a new election.</li> </ul>

	<ul style="list-style-type: none"> <li>• <u>Motion</u> to re-elect both chair and vice chair to their respective positions (Jim Simpson). Seconded (Jack Potter). All in favor. <i>Motion passes.</i></li> </ul>
<b>Public Comment</b>	<ul style="list-style-type: none"> <li>• None</li> </ul>
Kate Wilson  <b>Wrap up &amp; Adjournment</b>	<ul style="list-style-type: none"> <li>• Next meeting dates (2021): <ul style="list-style-type: none"> <li>○ Winter- Jan 20<sup>th</sup> (virtual)</li> <li>○ Spring- March 31<sup>st</sup> (TBD/likely virtual)</li> <li>○ Summer- August 25<sup>th</sup> (TBD/likely virtual)</li> <li>○ Meeting dates will be updated on the website.</li> <li>○ Contact us ahead of time for zoom/call in information has been working well.</li> </ul> </li> <li>• <u>Motion</u> to adjourn (Lech). Seconded (Jack). All in favor. <i>Motion passes.</i></li> <li>• Meeting adjourned at 12:02pm.</li> </ul>

<b>4. Action Items</b>				
<b>Action</b>		<b>Assigned</b>	<b>Due Date</b>	<b>Status</b>
1	Send out draft minutes	Kate Wilson Cassidy Bender	10/07/2020	Completed
2	Next meeting dates, location and logistics	Kate Wilson	9/29/2020	Completed
3	Add creation of a standing technical subcommittee for various projects to the next executive committee agenda.	Kate Wilson Cassidy Bender	9/23/2020	Completed
4	Send FBC E&O meeting invite/introduction email to water quality partners in the basin.	Kate Wilson Cassidy Bender	10/07/2020	Completed
<b>EXISTING ACTION ITEMS FROM PREVIOUS MEETINGS</b>				
4	Draft joint UC <sup>3</sup> letter on AIS importance/partnerships. Exec Comm to approve before submitting to local papers.	Kate Wilson	2020-21 season	In progress
5	Work with watershed staff on looking at opportunities that may work for state/federal partnerships	Agencies, Kate Wilson, Cassidy Bender	On-going	On-going
6	Reach out to other groups in basin for discussion on priority issues and potential partnerships	Kate Wilson, Cassidy Bender	On-going	On-going
7	Check with EPA and Lake/Flathead Conservation Districts (have watershed restoration plans to address TMDLs)	Kate Wilson	On-going	On-going
8	Address vacancies and reappointments on FBC –BC rep (ex-officio)	Kate Wilson	On-going	Completed with exception of BC