Flathead Basin Commission

BIENNIAL REPORT
2009-2010

Flathead Basin Commission
2009-2010 Biennial Report

THE FLATHEAD BASIN COMMISSION (FBC) was created in 1983 by the Montana Legislature to monitor and protect water quality in the one of the state's most important watersheds. The FBC is a uniquely structured non-regulatory organization that works to accomplish its important mandate in a consensus-building manner, stressing education, cooperation, broadly based community involvement, partnerships with agencies and nonprofit groups, and the voluntary participation of basin residents.

The 23 members of the Commission represent a wide cross-section of citizens and local, state, tribal, federal, and provincial agency representatives who strive to identify the basin's water quality problems and work collectively to implement the most effective solutions.

The FBC has become a model of successful citizen and inter-agency cooperation in a geographically vast and ecologically diverse watershed characterized by its overall pristine character, international dimensions, and multi-jurisdictional nature.

This report summarizes the FBC's activities and initiatives, and provides a summary of water quality trends. This year, we also highlight the Centennial celebration of Glacier National Park- 100 years of conservation and the stewardship of public lands (photos courtesy of the National Park Service).

More information on the FBC, including updates on activities, basin water quality issues, and the FBC's establishing legislation are available on our website. Those seeking more detailed information regarding any aspect of FBC and its activities are encouraged to contact us.

Flathead Basin Commission
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Kalispell, Montana 59901

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SUMMARY OF ACCOMPLISHMENTS (2009-2010)

OUR MISSION

To protect the existing high quality of the Flathead Lake aquatic environment; the waters that flow into, out of, or are tributary to the Lake and; the natural resources and environment of the Flathead Basin.

Leveraging Resources: With a base budget of under $100,000, the FBC has been able to directly raise well over $700,000 during the past four years for the programs listed below. In addition, we have been able to assist agencies/governments in leveraging funds in excess of $300,000 to support work critically needed in the basin. The modest investment in the FBC pays significant dividends.

Unique position within the Flathead Basin: The FBC membership, with representatives from federal, state, tribal, and local government, as well as citizen members, enables us to work across jurisdictional boundaries and embrace a multi-agency approach to problem solving. This has led to success on a number of fronts that have previously seemed intractable.

Transboundary Efforts:

1. BC-MT Memorandum of Understanding banning mining, coalbed methane, and oil & gas development was signed by Premier Campbell and Governor Schweitzer in 2010
2. Completion of the transboundary baseline study, and
3. Retirement of oil and gas leases in the north and middle forks of the Flathead River.

Monitoring Programs:

1. Surface water quality monitoring for long term trends analysis
2. Groundwater quality monitoring to detect contaminants in shallow aquifers, and
3. Volunteer monitoring program which collects data at over three dozen lakes in the Basin.

Aquatic Invasive Species (AIS) Program:

1. Successful passage of the Aquatic Invasive Species Act during the 2009 State legislative session
2. Formation of the Flathead Basin AIS work group
3. Completion of the Flathead Basin AIS Plan
4. Obtained funding to begin plan implementation
5. Sponsored AIS conference in Polson in the spring of 2010
6. Launched early detection volunteer monitoring program

SUMMARY OF ACCOMPLISHMENTS (2009-2010)

(AIS Accomplished continued)

7. Launched AIS outreach effort, including signage at boat launches
8. Worked with partners to obtain funding, equipment and personnel to assist with the AIS effort in the Flathead Basin, and
9. Currently in planning phase for boat check station on Highway 93 South (which will be operational for the 2011 field season).

Mapping Projects:
1. Critical lands GIS mapping to assist in land use planning efforts, and
2. Lidar mapping to assist in flood plain delineation and land use planning.

Education and Outreach:
1. In conjunction with partnering organizations, developed and sponsored the Flathead Lake Book and the Flathead Sourcebook
2. Commenced development of a riparian management training session for contractors in an effort to reduce non-point source pollution (Stormwater & Erosion Education Program)
3. Participation in the Flathead County wastewater management group
4. Conducted educational presentations related to stormwater management
5. Conducted educational presentations related to the management of shallow aquifers, and the contamination of such aquifers from Pharmaceutical and Personal Care Products (PPCPs), as well as VOCs and coliform
6. Commenced new efforts to address non-point source pollution and TMDLs.

Website development:
The FBC's revamped website will ultimately be designed and formatted to serve as a clearinghouse for all water quality information, research and database links (www.flatheadbasincommission.org)

Bigfork stormwater project:
Assisted in funding the Bigfork Stormwater Preliminary Engineering Report, which aimed to reduce stormwater runoff into Flathead Lake.

Vision:
We will continue to work towards furthering the goals and objectives of the programs outlined above through 2013.

MESSAGE FROM CHAIR

On behalf of the Flathead Basin Commission (FBC) we are pleased to provide our biennial report.

The accomplishments and challenges of the FBC will be discussed throughout this report. Collaboration, cooperation and persistence are the common threads that have driven the FBC's successes, and will enable us to meet ongoing and future challenges. The achievements of the last two years are not the FBC's alone but are a credit to all basin stakeholders.

On February 18, 2010, the State of Montana and the Province of British Columbia signed the *Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy*. This MOU is a milestone in that it bans oil, gas, coalbed methane, and mining in the transboundary Flathead, one of the key goals of the FBC since its inception in 1983. The continuing and persistent support of the State legislature over these many years finally came to fruition, and it appears that the headwaters of the Flathead will finally obtain permanent protection. While much work still needs to be done to safeguard the permanency of the MOU, the signing of this agreement is transformational. The Commission can not overstate our appreciation of the efforts Premier Gordon Campbell, Governor Brian Schweitzer, Senators Baucus and Tester, and Representative Rehberg in reaching this transboundry milestone.

In addition to success on the transboundary front, the FBC has worked on a variety of projects and programs focused on protecting water quality south of the Montana/British Columbia border. The diversity of Commission members, as well as the strength and commitment of our members and Executive Director, has enabled us to begin to tackle some of the toughest water quality challenges facing the basin today. In particular, our ability to bring together federal, state, tribal and local governments and organizations enables the FBC to leverage funds and in-kind services, and to develop broad-based programs on-the-ground that are supported by all of the key stakeholder groups.

The unique structure of the FBC allows it to monitor environmental threats and initiate timely responses. The potential introduction of aquatic invasive species exemplifies how the FBC can lead in responding to new threats that have potentially catastrophic environmental and economic impacts.

I look forward to The Commission continuing to earn support from the Governor's Office, the State legislature and the citizens of the Flathead Basin for our ongoing efforts to ensure that our watershed remains both economically and environmentally sound. Since both environmental quality and economic sustainability are interconnected, we must succeed at protecting the environment, as our natural amenities serve as the foundation upon which our economic success ultimately relies. -Ed Heger, Chair

MESSAGE FROM EXECUTIVE DIRECTOR

The last two years have been a time of incredible success and accomplishment. We made significant progress on a critical issue plaguing the Flathead for three decades. In 1983, the Flathead Basin Commission (FBC) was created, in large part, in response to threat of coal mining in the headwaters of the Flathead River in British Columbia. This year, 27 years after the creation of the FBC, British Columbia and the State of Montana finally reached the first tangible milestone in protecting the headwaters from industrial development. This is an achievement to be celebrated, but much work lies ahead.

We are now coordinating with State, federal and tribal partners on developing strategies for securing the MOU into perpetuity, which will necessitate an agreement at the federal level, as well as ongoing management of the area to (1) ensure that all terms and conditions of State and federal agreements are met; and (2) foster and develop cooperative management strategies to promote sustainable economies while protecting water quality and other natural resources. Therefore, while the MOU was indeed a welcome success, we are now beginning another chapter in our transboundary work—shifting from conflict resolution to cooperative management. The role of the FBC as both a watchdog and a partner in the cooperative transboundary management effort are vital in protecting the integrity of the headwaters of the Flathead River.

While the mandate of the FBC requires us to focus on the long term protection of the transboundry Flathead, we are also charged with monitoring and protecting water quality within the basin. To this end, the FBC has worked on a variety of programs over the last two years. However, one of our highest priorities relates to addressing the threat of aquatic invasive species (AIS) – particularly the introduction of zebra and quagga mussels. We have accomplished a great deal on this front, ranging from assisting with the successful passage of the Aquatic Invasive Species Act during the 2009 legislative session to the development of a Flathead Basin AIS Plan.

The AIS effort highlights the continued relevance and importance of the FBC separate and apart from the transboundary effort for which we are known. Based on our work in 2007-2008, it became apparent that AIS posed one of the biggest threats to the Basin. Yet no agency or organization possessed the authority or responsibility for developing a plan specific to the Flathead Basin. Recognizing this fact, the FBC convened an AIS work group composed of federal, state, tribal and local governments, along with a variety of stakeholder groups, to develop a seamless and multi-jurisdictional plan to protect the basin from aquatic invaders. Given our unique role and position in the basin, we are able to transcend bureaucratic barriers, reach out to adjacent counties and develop a robust plan to protect the basin. Implementation of the plan is currently underway.

The FBC plays the role of facilitator and liaison on a number of issues in the basin, working to fill the gaps which leave the basin at the greatest economic and ecological risk. It is our hope that our efforts to protect the Flathead Basin will continue to be successful, and we look forward to an ongoing working relationship with all of you to safeguard the clean water for which the Flathead Basin is known worldwide.

-Caryn Miske, Executive Director

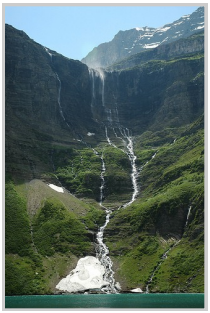
TRANSBOUNDARY:
An International Watershed

The North Fork of the Flathead River originates in southeast British Columbia and flows south across the international border into northwest Montana, where it forms the western boundary of Glacier National Park; the river then joins the Middle and South Forks of the Flathead and empties into Flathead Lake. The Canadian portion of the Flathead River and the US North Fork are truly an international watershed known as the Transboundary Flathead, which forms a physical link between the US and Canada, Montana and British Columbia. The Transboundary Flathead is one of North America's wildest rivers; home to native fisheries of pure westslope cutthroat and bull trout, as well as the complete suite of large and mid-size carnivores, including the grizzly bear, wolf, wolverine and Canada lynx. The B.C. portion of the Transboundary Flathead flows through the last wide, low elevation valley in southern Canada, with no permanent human settlement. The Montana portion of the watershed is federally protected under the Wild and Scenic River Act and is part of the Waterton-Glacier International Peace Park, a UNESCO World Heritage Site and a designated Biosphere Reserve.

For over thirty-five years the Transboundary Flathead has been a watershed of primary interest for the Flathead Basin Commission, citizens, state and federal representatives of Montana. Massive coal deposits, hard rock minerals and coalbed natural gas lie beneath the B.C. portion of the Flathead, which is also the headwaters of the North Fork. For decades, initiatives for coal, mineral and gas development have sparked cross-border discussions and controversy as to the appropriate land use regime for the landscape. To date, no commercial-scale industrial energy development has taken place in the headwaters of the Transboundary Flathead.

A Monumental Step Toward Collaborative Management of the Transboundary Flathead

On February 18, 2010, the Premier of British Columbia and the Governor of Montana signed a *Memorandum of Understanding and Cooperation on Environmental Protection, Climate Action and Energy* (MOU). The MOU acts on the obligation of the two governments under their *Environmental Cooperation Arrangement* of 2003. Representatives of Ktunaxa Nation Council and Confederated Salish and Kootenai Tribes spoke in support and signed the MOU as witnesses, highlighting that the Flathead River Basin in British Columbia and Montana is within their traditional territory and that they have used and continue to use the Flathead for hunting, fishing, trapping, gathering, recreation and as a travel corridor. The MOU sets outs a framework for environmental cooperation in the transboundary area including a mutual commitment to sustaining environmental values in the transboundary Flathead River Basin and recognizes that this area includes Glacier National Park, the international Peace Park and the World Heritage site. Under the MOU, British Columbia and Montana committed themselves to work together to, *inter alia*:



- Remove mining, oil and gas development and coal development as permissible land uses in the Flathead River Basin
- Cooperate on fish and wildlife management
- Facilitate mitigation of and adaptation to climate change

TRANSBOUNDARY

- Collaborate on environmental assessment of any project of cross border significance that has potential to degrade land or water resources
- Share information proactively, and
- Collaborate in responding to emergencies.

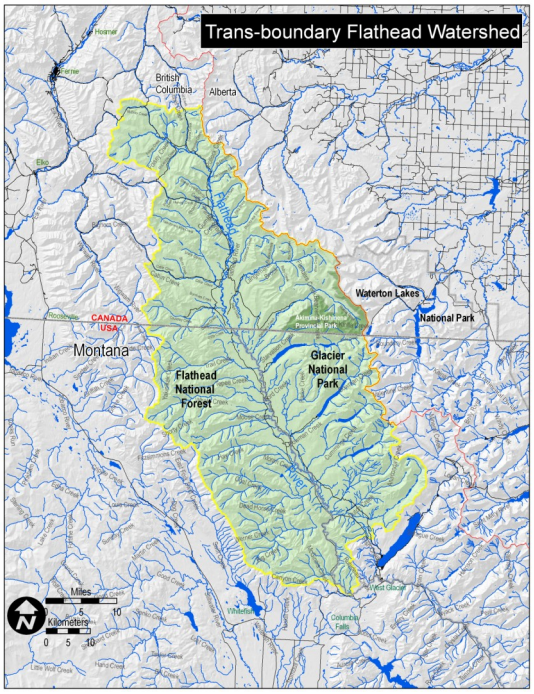
Three actions were taken by the provincial government to implement this policy decision:

1. A No Disposition Notation has been placed over the British Columbia portion of the Flathead River Basin to identify that the Ministry of Mines, Energy and Petroleum Resources will not post petroleum and natural gas rights for tenure in the Flathead;
2. A mineral and coal reserve has been put in place over the British Columbia portion of the Flathead River Basin to prevent the acquisition of new mineral titles and coal tenures; and
3. A Cabinet Order has been put in place to prohibit the issuance of permits (or exemptions from permits) under the *Mines Act* for any lands in the British Columbia portion of the Flathead River Basin.

Management Grounded in Science

In September, 2009, the UNESCO World Heritage Committee (WHC) and International Union for Conservation of Nature (IUCN) sent a joint science mission to the Waterton-Glacier World Heritage Site to investigate threats to the site posed by coal development proposals in the B.C. portion of the Flathead. The mission spent seven days in Montana, British Columbia and Alberta and presented their report at the 34th Session of the WHC in Brasilia in July, 2010.

The WHC/IUCN Mission relied heavily on science in their investigations, particularly the collaborative water quality, aquatic community, fisheries and wildlife research being conducted in the B.C. portion of the Flathead watershed. In 2007-2008 the Flathead Basin Commission received a state appropriation in support of this work, and the University of Montana, Flathead Lake Biological Station has recently completed the report on water quality and the aquatic community, titled, "*Transboundary Flathead Water Quality and Aquatic Life: Biennial Report; 2007 and 2008 Baseline Data Collection to Characterize North Fork of the Flathead River Basin Environmental Quality.*" As the two countries, the state and the province move forward under the auspices of the new BC-MT Memorandum of Understanding, science-based management will ensure that the Transboundary Flathead remains a biodiversity hotspot, with healthy native fish and transboundary wildlife populations for generations to come.



-Erin Sexton, Flathead Biological Station

STATE OF THE LAKE:
Update on Water Quality in Flathead Lake for the 2009 Water Year

Synopsis based upon: Ellis, B. K., J. A. Craft and J. A. Stanford. 2010. Monitoring water quality in Flathead Lake, Montana: 2010 Progress Report. FLBS Report #205-10. Flathead Lake Biological Station, The University of Montana, Polson, MT. 22 pp.

The Biological Station has carefully documented the status of water quality in Flathead Lake and its tributaries since the Station was founded in 1899. In the early days, studies were periodic. Since 1977, measures have been obtained about monthly by the Biological Station using standardized protocols. These studies have been the technical background for development of a Total Maximum Daily Load (TMDL) allocation for the purpose of managing nutrient loads reaching Flathead Lake.

Based on Station research, the Flathead Basin Commission (FBC) recommended the following interim targets for the protection of water quality in Flathead Lake:

1) no increase in the biomass of lakeshore periphyton,
2) no measurable blooms of *Anabaena flos-aquae* (or other pollution algae),
3) no declining trend in oxygen concentrations in the hypolimnion, and
4) average annual concentrations of the following variables in the photic zone of the Midlake Deep site in Flathead Lake will not exceed the values indicated:
   * chlorophyll *a* - 1.0 µg/L (1 microgram per liter)
   * primary production - 80 g C m^{-2} yr^{-1} (80 grams of carbon per square meter per year)

In the 2009 water year (WY; October 1, 2008 – September 31, 2009), periphyton biomass (algae growing on rock surfaces at a depth of 5 m) was within the range of values reported since monitoring began in 1999 (Figure 1). Although there was no trend in periphyton biomass at the "B" Beach site since 1999, an increasing trend was evident at the Horseshoe Island site.

No visual evidence of an algal bloom was detected in the summer and fall of 2009, but qualitative assessment will have to be confirmed after enumeration of surface phytoplankton samples. Lack of sufficient funding since the TMDL targets were established has resulted in limited information concerning this particular target. Additional funding is warranted to examine possible factors that cause the toxic blue-green *Anabaena* to flourish in certain years, to gain insight into the conditions that favor the growth of this noxious species.

The dissolved oxygen target was not met, though values were not as low as in the past. In WY 2009, percent oxygen saturation dropped to 81.5% and 64.5% near the bottom at Midlake Deep and Ross Deep, respectively. However, recent studies at the Biological Station have shown a statistically significant trend of decreasing percent saturation of dissolved oxygen in bottom waters of the lake after *Mysis* became established in the lake. Recent funding from the National Science Foundation will be used to deploy a buoy at the long-term Midlake monitoring site that will measure oxygen a few meters off the bottom. Oxygen concentrations will be relayed (via radio telemetry) from the buoy to the Biological Station near real-time, allowing us to monitor oxygen daily, thus improving our ability to detect periods of low oxygen throughout the late summer and fall.

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Analyte concentrations for WY 2009 were above the long-term average for midlake chlorophyll *a*, soluble reactive phosphorus (SRP), total nitrogen (TPN), ammonium nitrogen (NH_4-N) and nitrate nitrogen ($NO_{2/3}$-N) but below the long-term average concentration for total phosphorus (TP) (Figure 2). The mean midlake concentration of TPN (120 µg L^{-1}) and NH_4-N (8.9 µg L^{-1}) were the highest annual means recorded for integrated 0–30 m water samples since integrated sampling of the photic zone began in 1987. Mean chlorophyll *a* concentration (an indicator of algal biomass) was slightly above the long-term mean but the TMDL target was met for this parameter. There is a declining trend in chlorophyll *a* at the Midlake Deep site following the establishment of *Mysis* and recovery of zooplankton explains the decline in chlorophyll *a.*

In WY 2009, the annual rate of primary production at the Midlake Deep monitoring site was 92 g C m^{-2} yr^{-1}, a value similar to that measured in WY 2001 and WY 1994 (Figure 3), but exceeded the TMDL target by 15%. With the exception of water years 1994 and 2008, annual primary productivity in Flathead Lake has been at least 10% greater than the FBC target since 1989, and in 1998 exceeded the target by 55%. This target variable requires understanding of food web dynamics and cannot be interpreted independent of those dynamics. Funding is actively being sought for refinement of a food web model for Flathead Lake aimed at understanding the dynamics of foodweb interactions and the linkages of increasing nitrogen in the catchment and lake response variables, such as primary productivity.

Dramatic alteration of the composition of at least 3 trophic levels (e.g., fish, zooplankton and algae) of the lake food web occurred during the establishment of *Mysis relicta* in the mid to late 1980s (Ellis 2006). This essentially resulted in a lake with a different biological community which has likely altered nutrient cycling. Given the influence of the changing food web on lake response variables (e.g., primary productivity, chlorophyll *a*) we recommend that TMDL targets be revised to reflect trends for the post-*Mysis* period only. There are also many indirect effects that are the consequence of the establishment of *Mysis* in Flathead Lake and those interactions are complex. Additional funding will be actively pursued to model the changes that have occurred in the food web and its effect on the TMDL target parameters.

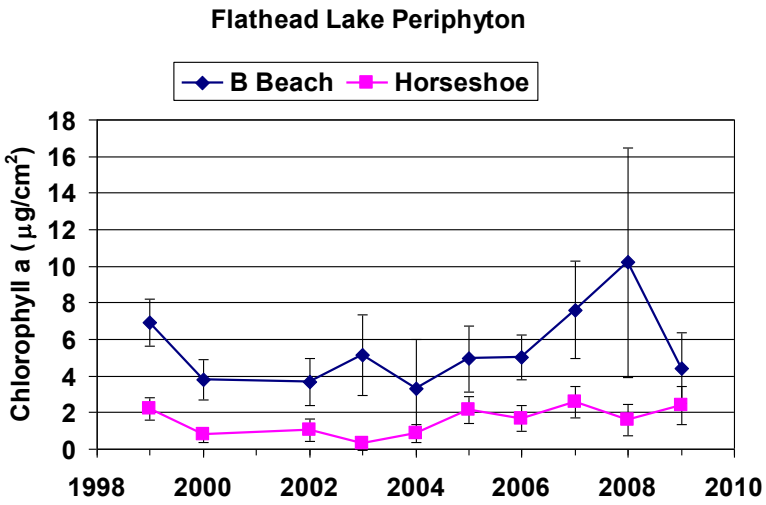


Figure 1. Mean periphyton biomass as chlorophyll a (µg cm^{-2}) ± 1 standard deviation at 5 m depth in August of each year at the two long-term monitoring sites on Flathead Lake.

STATE OF THE LAKE

Maintaining clean, clear water is a quality of life issue for Montana. We cannot know conditions without accurate measurements taken routinely year after year. We would like to say that we have an endowment from private sources to pay for the Biological Station's water quality program and thus not burden taxpayers at all. A fund for this purpose specifically for Flathead waters was established by the Flathead Protection Association and others a few years ago. Until we can grow this fund to several million dollars from private contributions, water quality monitoring and evaluation will continue to be dependent on government sources.

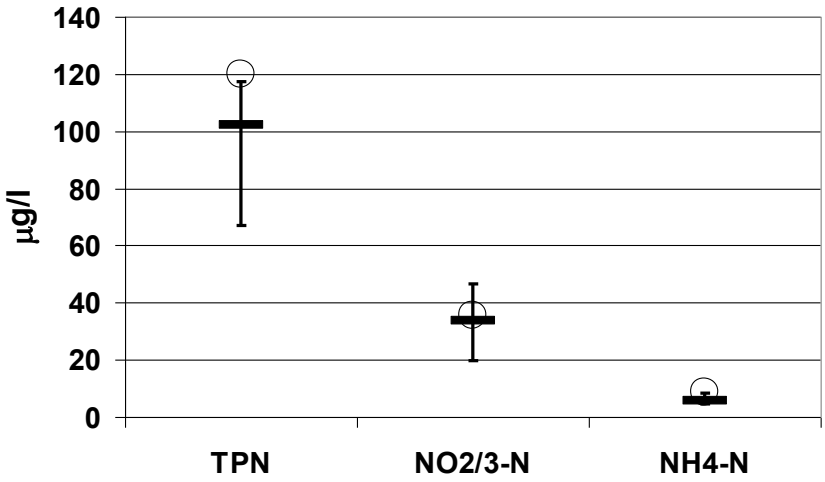


Figure 2. Long-term annual mean (thick bar) and range of annual means (thin bars) for nutrient and chlorophyll a concentrations of 0–30m integrated samples collected from 1987 to 2008 at the Midlake Deep site on Flathead Lake. Integrated means were calculated for each water year (i.e., October 1– September 30). Integrated mean concentrations for the 2009 water year, October 1, 2008 to September 30, 2009, (circles) are also presented for comparison.

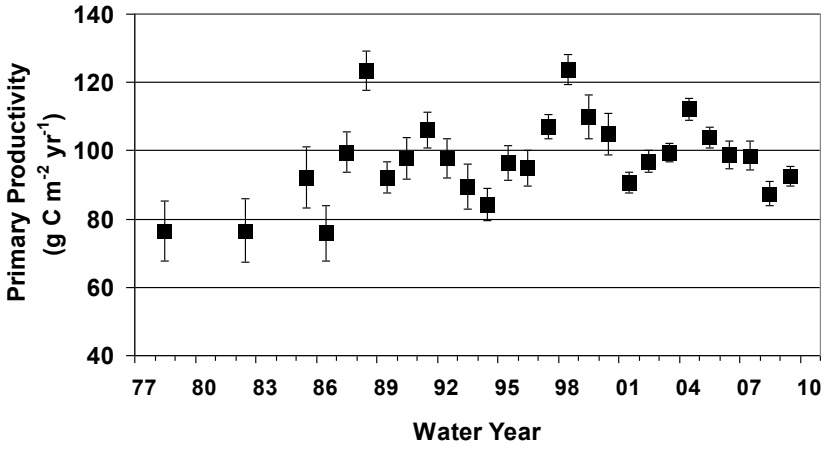


Figure 3. Mean annual pelagic primary productivity (g C m^{-2} yr^{-1}) at the Midlake Deep site for Flathead Lake from 1978 to 2009. Bars represent minimum and maximum yearly estimates.

FBC IN ACTION

Transboundary: Efforts related to protection of the transboundary Flathead are discussed earlier (see pages 6-7). The FBC also participates in the Crown Manager's Partnership, a group of resource managers from Montana, Alberta, and British Columbia that demonstrates leadership in addressing the environmental management challenges in the Crown region by adopting transboundary collaborative approaches to environmental management. The voluntary partnership seeks to build common awareness of Crown interests and issues, shape relationships, and identify collaborative and complementary tasks that the various participating jurisdictions can pursue. In addition, the FBC played an important role in assisting the Congressional delegation with the retirement of the oil and gas leases in the north and middle forks of the Flathead River.

Monitoring: The FBC manages and facilitates a variety of monitoring programs which serve to gauge, among other things:

(a) surface water quality monitoring trends;
(b) the success or failure of best management practices;
(c) the impacts of various types of land uses activities; and
(d) the presence or absence of aquatic invasive species.

Surface water quality monitoring: The FBC continues to serve as the organization which facilitates efficient and effective surface water monitoring activities at a basin scale.

Volunteer monitoring: The FBC's volunteer monitoring program provides residents with the ability to monitor water quality in the lakes adjacent to which they live. This year we have expanded the number of lakes that are being included in the program, the sampling frequency, and we have added two early detection aquatic invasive species monitoring components.

Groundwater monitoring: The FBC has commissioned a study to examine the health of shallow aquifers within the Basin. The sampling protocol monitors for VOCs, SVOCs, coliform and Pharmaceutical and Personal Care Products (PPCPs). The results from the first round of sampling has shown that the majority of shallow aquifers suffer from some level of contamination, but the final results of the study will not be available until the summer of 2011.

Lidar Mapping: The FBC sponsored the development of lidar maps which will be used to identify flood plains and other critical features within the flood plain/flood way. Again, this information will be useful to developers and county officials in determining the proper siting of structures thereby protecting property values, water quality and other aquatic amenities.

FBC IN ACTION

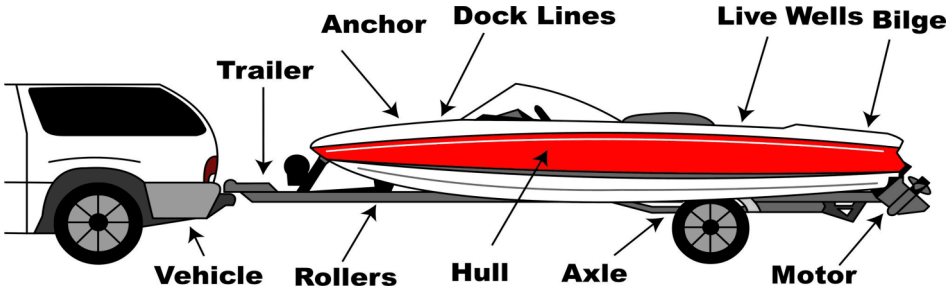
Education and outreach: The FBC works on a variety of public education efforts, often in conjunction with our local partners, such as the Crown of the Continent Ecosystem Education Consortium and the Flathead Community of Resource Educators. Over the past two years, the FBC has worked with partnering organizations and assisted in sponsoring the Lake Book, the Sourcebook, outreach and training efforts related to best management practices (BMPs), non-point source pollution, wastewater management, stormwater management, setbacks, concerns surrounding PPCPs in water supplies, and the threat of aquatic invasive species (AIS).

Critical lands: The FBC, working with the Flathead Lake Biological Station, provided GIS mapping data on a variety of critical lands components, including but not limited to: depth to groundwater, riparian corridors, soil type, etc. This information will be used to assist Flathead County in identifying areas where higher density development is preferable from both an economic and environmental perspective.

Website development: The FBC's revamped website will ultimately be designed and formatted to serve as a clearinghouse for all water quality information, research and database links.

Aquatic Invasive Species (AIS): The introduction of aquatic invasive species, especially the potential threat posed by zebra and quagga mussels has significant economic and ecologic implications. These invasive mussels clog dam operations and water delivery systems for drinking water and irrigation, foul beaches and boats thereby reducing tourism revenues and property values, and increase the cost of electricity for all users. The ecological impacts are no less daunting, as native fish and sport fisheries are significantly impacted, and the ripple effect throughout the food chain can be severe. Recognizing the potential adverse impacts of quagga and zebra mussels, the FBC became involved in the education and outreach associated with AIS beginning in 2007, providing an AIS component during our *Large Lakes* conference. By 2008, the FBC was working with state legislators in the Flathead to educate the public and stakeholder groups about the need for special legislation to address the threat of AIS. Our effort paid off. Under the leadership of Senator Verdell Jackson and Representative Janna Taylor, the State Aquatic Invasive Species Act became effective on July 1, 2009. The Act provided additional funding for the AIS effort, along with increased regulatory authority which would permit specified agencies to establish mandatory boat check stations.

Although the Aquatic Invasive Species Act was a step in the right direction, it became clear that local efforts would be needed for the Basin to obtain the level of protection required to prevent a mussel infestation within the Flathead. Hence, the AIS work group was formed.



FBC IN ACTION

(AIS CONTINUED)

The FBC brought together State, Tribal, Federal and local agencies and governments, as well as interested stakeholder groups to develop a basin-wide AIS plan. The mission of the Flathead Basin AIS work group is to work locally to help prevent the introduction of aquatic invasive species into the Flathead Basin, and to help contain, control and, where possible, eradicate the aquatic invasive species present in the Flathead Basin. The plan drafted by the AIS work group was finalized in July of 2010 (after a 30-day public comment period), and is designed to support and supplement the State AIS effort, but it also goes beyond the protections afforded by the state, and includes, but is not limited to: early detection monitoring; rapid response; outreach and education; research and boat check stations. The Flathead Basin AIS Plan has been submitted to the State of Montana for incorporation into the larger State AIS plan.

In addition to developing the Flathead Basin AIS Plan, the AIS work group, under the leadership of the FBC, has accomplished the following: developed a working partnership with the State agencies administering the State AIS program—the Department of Agriculture and Fish, Wildlife and Parks; held an AIS conference in Polson in the spring of 2010; launched a basin-wide education and outreach effort which has included public service announcements, public presentations, and signage around the entirety of several high risk lakes in the Basin, and multi-media coverage; development of the Glacier National Park boat inspection program; and worked with partners to obtain funding, equipment and personnel to assist with the basin-wide AIS effort.

While we have made incredible strides over the last two years, much remains to be done. The FBC will continue to work with the State delegation to assist in the outreach and education required for passage of additional AIS legislation during the 2011 session. In addition, given projected budget cuts, the future of the AIS prevention effort is uncertain. To address projected shortfalls, the FBC will continue to work with local partners and others to develop alternative funding sources to aid in the AIS prevention effort. It is clear that if we are to be successful in preventing an infestation of invasive mussels, efforts will be required at *both* the state and local levels. We must act quickly and effectively in order to get ahead of the curve, as viable quagga and zebra mussels are now being found on boats entering Wyoming, Idaho and even Montana. We still have the opportunity to act, but time is growing ever shorter. We urge each of you to become engaged in the this important effort to stop Aquatic Invasive Species from Invading our waterways.

APPENDIX A: FBC BUDGET

FBC Administrative Budget

FBC Expenditures:	2009-2010 Expenditures
Personal Services	
Salaries	$63,559
Benefits	$18, 401
Vacancy Savings	($5,716)
TOTAL PERSONAL	$76,244
Operating Expenses	
TOTAL OPERATING	$19,494
TOTAL ALLOCATED ANNUALLY BUDGET FY2010	$95,738
Existing Donations	
PPL	$10,000
Lake County	$5,000
Sustainability Fund	$2,500
TOTAL DONATIONS	$17,500
Grants/Contracts	
BC Action Plan	$300,000
Phase I Groundwater	$25,000
Phase II Groundwater	$100,000
TMDL Grant	$18,000
DEQ Mini-Grant (AIS)	$1,500
Dept. of Agriculture	$8,000
Lidar Mapping	$300,000
TOTAL GRANTS/CONTRACTING	$749,500

The FBC would like to thank the State Legislature and the Congressional delegation for providing critically needed transboundary funding. We would also like to thank all of the individuals and organizations providing funding and invaluable in-kind assistance. Without such support, our work would not be possible.



APPENDIX B: FBC MEMBERS

Dan Bangeman
Supervisor
Flathead Conservation District

Tom Bell
Regional Manager of Environmental Stewardship, Parks and Protected Areas, Ministry of Environment-British Columbia

Joe Brenneman
Flathead County Commissioner

Susan Brueggeman
Director
Lake County Environmental Health Dept.

Chas Cartwright, FBC Vice Chair
Superintendent,
Glacier National Park

Ed Heger, FBC Chair
Citizen Member-Polebridge, Montana

Rich Jansen
Division Manager
Natural Resources Department-Division of Environmental Protection
Confederated Salish and Kootenai Tribes

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