For thousands of years, the Ipswich River ran free from source to sea, and bountiful runs of migratory fish returned from the Atlantic every year to spawn. Then in the 1800s, dams were built to power industry, blocking fish migrations and greatly changing the nature of the river. Most of these dams no longer serve their intended purpose, but continue to block the movement of fish and drown natural rapids. Dam owners across Massachusetts are required by law to maintain and repair their dams and are liable for any safety hazards—many are opting to remove their dams to eliminate these costs. Owners are helped by generous state and federal programs that fund removal of dams that impact native ecosystems.

Removing dams on the Ipswich River will be a multi-year process. First the dam, pond and surrounding site must be studied to see what effects its removal would have on safety, infrastructure, and the health of the river. Initial studies often ask: Are there any pollutants in the sediments behind the dam? Will removing the dam reduce or worsen flooding? And, will removing the dam affect nearby buildings or bridges? Once this study is complete and if the owner decides that they want to remove the dam, an engineering plan is developed. Only once this plan is approved by local, state and federal agencies can the dam removal actually begin.

IRWA is collaborating with dam owners, state and federal agencies, and funders to study the feasibility of removing three dams. IRWA received a $21,000 grant from the Gulf of Maine Council/NOAA Habitat Restoration Partnership and $10,000 from the Massachusetts Division of Ecological Restoration to study the South Middleton Dam on the Ipswich River. We will be assessing the level of sediment contamination behind the dam and the infrastructure needs of an adjacent factory site. Bostik, Inc., the dam’s owner, is also providing partial funding. IRWA is also working with the Town of Danvers on a study of an obsolete dam they own on Boston Brook in Middleton. Our newest project is a study of the Ipswich Mills Dam, located in downtown Ipswich. In March, the Ipswich Board of Selectmen voted unanimously to begin investigating environmental, technical, logistical and economic factors related to the removal of the dam. The planning team has raised approximately $20,000 in matching funding from public and private sources and has requested $20,000 from the Gulf of Maine Council/NOAA.

Taken together, these three studies represent some of the most significant advances to date towards better understanding the problems dams pose to the river and to identifying potential solutions. IRWA will conclude these studies in 2010 and 2011 and hopes conditions will allow them to proceed to the next phase of design and permitting.

Beware the ides of March… and the ides of May… and some other dates, too

This spring, the Ipswich River reached near-record flood levels twice in March. The top five floods ever recorded (records go back to the 1930s) on the Ipswich River have all occurred since 1987. This is probably due to a trend toward more intense storms. Also, the upper Ipswich River Watershed has quite a lot of development, which makes flooding worse, because water runs off pavement and buildings instead of soaking into the ground. Fortunately, the flood damages were not as severe in 2010 as in 2006, and recovery was quicker.

It would be nice to think that we won’t have to worry about the river drying up this year because of all the spring rain. We hope that is the case! Just for a reality check, the lowest flow ever recorded on the Ipswich River (0.02 cfs) occurred in December 2001, the same year as the then-highest flood at South Middleton. So, we should still save water, especially in the summer.
Letter from the Executive Director

So, on this anniversary, I would like to honor and thank Earth Day’s visionary founders, Senator Gaylord Nelson, Denis Hayes, and all the “grassroots” who have helped to build the environmental movement, here in Ipswich and leaders.

But the first Earth Day was the catalyst and clarion call, putting the environment in the political limelight for the first time. Earth Day proved to politicians that there was widespread political support for landmark legislation like the Clean Air Act and the Clean Water Act. It ushered in the environmental movement, formalized environmental science as a field of study, and helped create a new generation of environmental scientists and leaders.

Our River and Global Warming

As I write this (on March 31st), rivers throughout eastern Massachusetts are still rising from the third big rainstorm in the last three weeks. Many rivers are having record floods again, dams are in danger of failing again, roads are washed out again, and people are facing yet another round of dealing with damage to their property from flooding.

The intense storms and floods that we’ve had this spring have me thinking about global warming.

Models of climate change for New England predict not only warmer temperatures, but more frequent intense storms and droughts: warmer, wetter winters and hotter, drier summers. (See www.climatetrends.org for a climate-change tool showing these predictions.) More extremes mean more risks of floods and extreme low-floows for our rivers.

New England is already experiencing more frequent, intense storms. Climate models also predict summer heat waves of 1-2 months over 90°F and 6-24 days over 100°F (compared to current averages of 9 days and 1 day respectively). Droughts are expected to occur in ~20 years out of every 30, compared to 13 currently. Ipswich’s climate later in this century is expected to be similar to that of South Carolina today.

Increasing sea levels are predicted to increase flooding, erosion and storm damage, and may lead to salt water intrusion in wells. Armoring coastal banks with rock typically only shifts the damage elsewhere and interferes with natural coastal processes. Coastal areas, like floodplains, are very dynamic, constantly moving and changing. The more we build with natural coastal processes, the more at risk both the natural and built environments – and people – become. (Continued on page 3)

What YOU can do:
- Save water, which also saves energy, money and the environment
- Use drought tolerant plants in your yard
- Store water in cisterns and rain barrels
- Work with your local officials to improve floodplain protection and remove obsolete dams

Enclosed is my donation of:
- New Membership $15
- Family/Individual $40
- Student/Senior $25

Please make check payable to the Ipswich River Watershed Association and mail to: IRWA, PO Box 576, Ipswich, MA 01938-0576 or click the “Become a member” link at www.ipswichriver.org

Thank you very much!
Rainbarrels Protect the Ipswich River

When you use the rainwater you collect in your rainbarrel to water your lawn or garden, you’re saving money and doing your part to leave water in the river for the fish, birds, and other animals that live there. We use a rain barrel and cistern system for watering at Riverbend.

Conserving water and energy goes hand-in-hand, helps the environment, and saves you money.

We also need to become less reliant on groundwater in summer. Our rivers need cool groundwater to sustain river flow, fish and other river life. Warmer temperatures may also lead to more bacteria in our water, requiring preventive and corrective measures to ensure that there is enough safe water for our future needs.

Storing water in cisterns and rain barrels can help reduce water demand in summer. Using water efficiently can help reduce groundwater pumping and environmental damage.

Hopefully, we can act individually and collectively to meet these big challenges. I urge you to support organizations like IRWA and others that help preserve floodplains and riverfront lands.

Please help your town or city take action to protect floodplains and other key land and promote water conservation and low-impact development. Let’s be as prepared as we can to minimize possible damage and help the natural systems that we depend on to adapt and sustain us in the future.

Above: Kerry walks the dry river bed in 2003. Global warming predictions include more frequent intense storms and droughts. This means more risk of floods and dry river beds.

HUGE THANKS to the Essex County Trans Association, whose volunteers cleared trees that had come down during a storm two months ago, and were blocking our trail. They were on the job within days of our request for help, and did a wonderful job.

IRWA depends on your support! Together, we can make a difference!

Here is a tax-deductible gift for IRWA, the Voice of the Ipswich River.

Name __________________________
Address ________________________
Town/City ______________________
State/Zip ________________________
Phone _________________________
Email __________________________
Website _________________________

I want my donation to go to:
☐ New Membership
☐ River Stewardship
☐ Water Quality
☐ Education
☐ Energy/Water Efficiency
☐ Other _______________________

Enclosed is my donation of:
☐ $50
☐ $100
☐ $250
☐ $500

Please make check payable to the Ipswich River Watershed Association and mail to: IRWA, PO Box 576, Ipswich, MA 01938-0576 or click the “Become a member” link at www.ipswichriver.org.

Thank you very much!
New Canoe Dock

Our new canoe dock is in, thanks to volunteers from New England Biolabs. Canoes are right by the river, ready for members to launch for free, or bring your own. Come paddle what many people say is the most beautiful and least frequented part of the river.

The La Vida Adventure Club from Wenham canoes the Ipswich River from Bradley Palmer State Park to Riverbend on Earth Day and lands at our new canoe dock, has lunch at our picnic table, and clips buckthorn (an invasive plant).