Heart of the Continent Partnership Voyageurs National Park International Falls, Minnesota January 16, 2009

Welcome and Introductions

Rich gave an overview of the Heart of the Continent Partnership (HOCP) and reviewed the HOCP values statements.

Participants: Rich Kelley – Quetico Foundation, Robin Reilly – Quetico Provincial Park, Sue Spencer – Ely citizen, Lawson Gerdes – Minnesota Department of Natural Resources, Cory MacNulty– Voyageurs National Park Association, Kathleen Przybylski – Voyageurs National Park, Darryl McLeod – Ontario Ministry of Natural Resources, Chuck Lepper – Koochiching County Commissioner, Kris Reichenbach – Superior National Forest, Kevin Adee – Koochiching County Commissioner, Brian McClaren– Lakehead University, Cam Trembath – Voyageurs National Park, Jeff Eibler – Minnesota Department of Natural Resources, Lisa Pattni – Superior National Forest, Doug Franchot – Voyageurs National Park Association, Brad Sagen – Northeastern Minnesotans for Wilderness, Wes Peterson – Minnesota Department of Natural Resources, Kurt Lysne – VNPA & Rainy Lake Conservancy, Nick Schlesser – Minnesota Department of Natural Resources, Ed McLeod – Rainy Lake Conservancy, Mike Ward – Voyageurs National Park, and Doug Skrief – Northern Counties Land Use Coordinating Board Coordinator

Voyageurs National Park - lake level studies - presented by Cam Trembath, Voyageurs NP

In 2000, the rule curve that regulates the water levels in the Namakan and Rainy Lake Reservoirs changed based on recommendations from the National Park Service, Minnesota Department of Natural Resources, the Kabetogama resort community and other organizations. The recommendations focused on the goal of having water levels that better mimic a more natural regime. The National Park Service has five projects in various stages of completion that will determine the effects of the 2000 Rule Curves on five "best bet" ecological indicators: benthic macro invertebrates, wetland vegetation, fish, common loons, and furbearers. Cameron gave a brief overview of each study.

- Benthic macro invertebrates This study assessed benthic communities. The final report is completed.
- Wetland vegetation (macrophytes) This study looked at aquatic plants. The final report is completed.

- Fish This study assessed the impacts of water level changes on pike spawning habitat. The final report is in draft.
- Common Loons This study assessed the impacts of lake level changes on the nesting success of loons. The final report is in draft.
- Furbearers This study looked at the effects of winter draw down on beaver lodges and what the beavers are doing to survive the change. The study assessed when beavers abandon the lodge or change forage behaviors in order to survive. Researchers captured and tagged ~300 beavers and put transmitters in ~60 beavers to track their movements. The final report is in draft.

Researchers will be challenged when evaluating the data because of natural water level events that happened shortly after the rule curve change – three flood years and one drought year

What happens next? A report is due to the International Joint Commission (agency that sets and manages the rule curve) in 2015. Studies should be wrapped up by 2010 to allow time for analysis. Jeff Eibler said that there is a steering committee that serves as an umbrella organization for all of the studies, the Rule Curve Monitoring Committee. This Committee is trying to coordinate all of the studies. Preliminary results show that the benefits we are likely to see are on the Namakan Reservoir because the changes on the Rainy Reservoir were minor compared to Namakan. The Namakan Reservoir's water level used to change up to 9 feet.

Residents often think that the dams should just be opened more to deal with high water years, but the dams can only control so much water. There are natural lake features that constrict waterflow.

The park is involved in two other studies related to lake levels:

- Nutrient Cycling and Relation to Changes in Water Levels for Kabetogama Lake, Voyageurs National Park (October 2007-September 2010)
- Assess Effects of Water-Level Fluctuation on Bioindicators Using Analytical Models (October 2008-September 2011).

Steve Windels, Biologist at Voyageurs National Park is the contact for additional information related to the lake levels studies.

SLICE – Sustaining Lakes in a Changing Environment – Jeff Eibler

SLICE Program Study Goals

• to monitor stressors and habitat conditions in our lakes

- monitor fish community indicators
- go beyond documenting the decline

The SLICE program looks at human impacts – stressors – on a lake environment:

- Shoreline development
- Fertilizers
- Invasive species
- Climate change
- Ethanol production

Jeff presented ice on/ice off data. The graph showed that ice is forming later and melting earlier. Other points to consider are the impacts of more runoff- flow, sediments, and nutrient loading, longer growing season, warmer waters, wet-dry fluxes (evaporation & precipitation), and exotic species.

There are potential impacts on fish if lake waters warm. A number of species rely on the cold water, well oxygenated habitat. If we start to have more nutrients and warmer water, lakes will move from cold water to cool water (walleye, pike) to warm water (bass, bluegill) to very warm and lots of nutrients (carp, bullheads). Each change would likely bring a change in fish composition.

Legislative-Citizen Commission on Minnesota Resources (LCCMR) funds support the SLICE program. SLICE is starting the 2^{nd} year of a 4 year pilot study to"

- get background information
- figure out what works
- build partnerships

SLICE has identified 24 sentinel lakes – lakes that stratify and those that don't – that receive annual, extensive monitoring. Monitoring includes monthly water quality profiles, secchi disk readings (for water clarity), lake level data, monthly zooplankton, annual aquatic plant surveys, and annual fish surveys.

Researchers will test other lakes every six years to compare data collected to that collected from the sentinel lakes.

For more information about the SLICE program contact:

Ray Valley, Research Biologist, SLICE Coordinator 651-259-5815– www.dnr.state.mn.us/fisheries/slice

2008 Status of the Fishery (Rainy Lake) - Nick Schlesser

Rainy Lake – Rainy is a large lake in Minnesota that the DNR has tapped for annual monitoring.

Management and Monitoring Activities

- Spring crappie trap netting
- Light trapping for young of the year northern pike
- Viral Hemorrhagic Septicemia (VHS) a deadly fish virus and an invasive species Creel survey
 - Record angler hours
 - 2008 most pressure from Minnesota local pressure, non-resident pressure went down quite a bit
- 65% of catch was walleye, northern pike 15%, spring nighttime electrofishing (small mouth bass and young of the year (yoy) walleye where did they end last year; don't grow over the winter)
- Shoreline seining for young of the year gamefish (walleye)
- Fish community index netting (deep water fish 60' 100' deep)
 - o 9-50' panels; primarily for lake whitefish
- Sample commercial fishery
- Fall nighttime electrofishing
- Annual fall index gillnetting (Sept)

Lake Sturgeon Presentation Summary and Discussion

On Thursday, January 15, 2009, Steve Windels and Darryl McLeod gave a presentation about a study on Lake Sturgeon population characteristics, movements, and habitat use in the Namakan Reservoir. There are two simultaneous studies occurring, which works well for sharing and comparing data. One study focuses on the Namakan Reservoir and the other looks at the Namakan River. Voyageurs National Park, Ontario Ministry of Natural Resources and South Dakota State – working on this too

Namakan River Hydro Dam project - go to opeg.ca for current information

Darryl said that one of the hurdles of the project is that some field projects have been delayed. All reports are needed for OPEG to finish their report.

Robin – dam project – when Canada signed the Kyoto Protocol, Ontario's challenge was to close one coal fired power plants each year until they were all closed. Since the Ontario government would pay for green energy various companies and individuals started to explore options. Most

untapped hydropower is on lands associated with aboriginal communities. Ontario said that they would only accept proposals from aboriginal communities or First Nations. The Namakan River dams are being proposed as run of the river dams.

A participant asked if there is one place where all the information comes together to reference it. Darryl said that he can share reports that are completed. He said that documents can be put on the HOCP website. The Rainy Lake Conservancy has information about the dam project on its website too.

Kurt suggested that HOCP could use a Wikipedia page to archive presentation material. Kurt would be willing to index the information for HOCP.

Brian suggested that HOCP provide a live broadcast of its presentations. Brian offered Lakehead University's equipment for this purpose.

Ken Burns' National Parks: America's Best Idea film preview - Mike Ward

Mike introduced the promotion segments for this movie. The National Park Service will receive more information about the release of this movie in April. Voyageurs National Park will work with its partners to host events related to the film's release.

Centennial Events

Kris Reichenbach- Superior National Forest

- Forest Management Plan and historic information are guiding planning; bring people up to the present and then launch point for the future
- Interpretive Programs people in costume representing historic characters traveling
- 5-day Sled dog trip combination trip between Superior and Quetico (March)
- Local events, fairs and festivals going to Twin Cities too
- Canoe the Heart Expedition July

Robin Reilly - Quetico Provincial Park

- Canoe the Heart, Dragon boat races
- Snowshoe & Skiing events
- Rodney Brown February 14, The Big Lonely: music of the northwest's voyageur heritage, Atikokan

- Q100.com – trying to formally recognize 100 partners that support Quetico through green businesses

Canoe the Heart Centennial Event update- Rich Kelley

- Ground crew/community group do the main event planning and coordination; paddlers stay only a short period of time

HOCP Steering Committee Update – Doug Franchot

- Greg Sietz website coordinator
- Cory MacNulty website editor
- Seeking steering committee members Doug chairing this activity

Open Discussion

Chuck Lepper reiterated the importance of making sure that Chambers, Lake Associations, and governing bodies are invited to and involved in HOCP events and meetings.

Kevin Adee stated that it is very important to keep dialog open.

Cory asked Kevin and Chuck for meeting topic ideas

Lawson informed the group about the Society for Conservation Biology. The Society for Conservation Biology (SCB) is an international professional organization dedicated to promoting the scientific study of the phenomena that affect the maintenance, loss, and restoration of biological diversity. Lawson felt that the group has a goal of solving real world problems in terms of technology and ecology.

Next Meeting – April 1 & 2, 2009, Quetico Provincial Park

April 1 – evening - festive flavor April 2 – meeting focus: economic impact – What's going on in the area in terms of tourism, staff and other aspects that impact economies?