

Opening Remarks:

Ray DiRaddo- Monroe County

- Monitor water quality and quantity
- Monitors Ontario Beach daily
- Duran Beach reopened
- Greece- open space committee
 - Develop policy & procedures for dealing with pesticides
- Implementing Phase II of stormwater regulations

Great Lakes Restoration Campaign- Brian Smith

- 9 priorities for GL Restoration
- 2004 Bush issued executive order – GL Interagency Task Force
- Directed EPA to convene regional collaboration
- Dec. 2004 GLRC – Chicago- 1500 people
- Dec. 2005 8 teams- GLRC - \$20b plan
- 2006- GLCIA- Federal legislation introduced – NYS we have both Senators
 - 14 House Co-sponsors
 - Goal remains to pass legislation
- Short-term priorities- grants for on-the-ground restoration projects
- GLCIA should ultimately continue to be reflection of GLRC

Habitat Restoration- Sean Mahar, Audubon New York

- Lost more than ½ of wetlands
- Lost 60% of forest
- Loss of key habitat affects humans & wildlife
- \$50b lost annually
- 40% increase in Lake Trout
- Reintroduce Lake Sturgeon'
- Wetlands
 - 5500 acres
 - 1-4 pairs of breeding water fowl
 - acknowledge, develop & enhance
 - increase DEC's jurisdiction over freshwater wetlands

Water Quality & AOC's – Dereth Glance

- 1987- NY had 6 AOC's-
 - Oswego
 - St. Lawrence
 - Rochester
 - Niagara River
 - Buffalo River
 - 18 mile creek
- Contaminated sediment, sewage, non-point source pollution, habitat degradation
- US- 75 cubic yards of contaminated sediments- \$1.5-4.5b annually for clean-up

- Eco-system based approach, community involvement, funding tapered off in mid-1990's.
- GLRC recommended that we need to continue in US plan- allows for removal, doesn't shift pollution
- EPA- head for GL in Region 5
- GAO- documenting administrative problems
- Reauthorize GL
- Delisting targets finished by 2008
- Oswego River – Remedial Plan- 1986 & in 1999 amended
 - PCB's
 - Dewatering
 - Degraded fish populations
 - Sewer treatment plant improvements
 - Dam removal
- Rochester embayment-
 - Fish & wildlife
 - Tainting of fish & wildlife
 - Drinking water
 - Fish tumors
 - Bird & animal deformities
 - Restricting of dredging activities
 - Loss of fish & wildlife habitat
- Coastal Health
 - Evaluated 22 sewage treatment plants
 - Average grade C- in GL Basin
 - Rain events will be more significant and more severe
 - Improve way treating sewers & sewage
 - Non-point source pollution- ag runoff, oil, petwaste, stormwater reduction
- Phase II- rules from EPA- unfounded mandate for way stormwater is discharged
- Beaches- Testing the Waters- CCE & NRDC
 - What beaches, how often & why
 - 31 days- Lake Ontario, 2005 closed
 - GLRC0 eliminating untreated wastewater, full implementation of weather control
 - Refocusing dollars
 - 13.7b for improvement in infrastructure
 - 50m over 5 years improvements in wastewater
 - Fully funded state revolving loan fund – grants to states to update sewer systems
 - Many sewers have not been updated since the 1970's. – line item in EPF.

Larry Sorel – Seneca Park Zoo

- Can provide education to the public regarding environmental issues such as invasive species.
- Functions as an environmental advocate.
- Has opportunities to gain funding for Great Lakes restoration.
- Member of Great Lakes Zoo and Aquarium Alliance.

David Klein – The Nature Conservancy

- Involved in restoration of Sandy Creek watershed and Eastern shore barrier beach ecosystem which is crucial for sheltering wetland from Lake Ontario. The Sandy Creek Project is a pilot project combining services for ecosystem state management.
- Tug Hill Core Forest (part of Great Northern Forest). This area is the last natural coverage of Lake Ontario. The rivers and streams of this forest flow into the watershed of Eastern Lake Ontario. IJC Study. Support Plan B plus! This waterflow regulation plan provides and opportunity to partially restore the natural rhythm and flow of Lake Ontario.

Cindy Stachowski- LOCI

- New York's Lake Ontario Coastal Watersheds
- 320 miles of coastline
- 44 coastal towns, villages & cities
- 144 municipalities
- LOCI Mission Statement:
 - All of NY Northern Coast
 - Enlist & retain broad public commitment for remediation, protection, conservation & sustainable use of the coastal region
 - Secure funds & resources to achieve scientific understanding, educate citizens and implement locally supported priorities, programs & projects as identified through this initiative.
 - Local grants
 - Research & monitoring suspended solids, phosphorous & invasive species
 - Governance

Betsy Landre- FLOWPA

- Keuka Lake
- CWA
 - CSO's
 - Stormwater
 - Wetlands
 - Habitat Improvement
 - Local Advocacy
- Buffalo River AOC priorities
 - Contaminated sediments
 - RAP implementation
 - Greenway, public areas, & habitat restoration
 - Collaboration & coordination

Stephanie Lindloff – American Rivers

- River restoration through dam removal.
- Removes dams that are no longer useful to allow free flowing rivers – positive effect on the ecosystem.
- Presently are 6,000 dams in NY
- Present project is the Fort Covington Dam on the Salmon River. Originally built for hydropower. When removed will allow unrestricted fish passage with positive benefits for migratory fish species.

- NYS lagging behind in dam removal. PA has active dam removal program in place.

Julie O'Neill and Jill Jedlicka – Buffalo Niagara Riverkeeper

- Niagara River AOC priorities – contaminated sediment, CSO, stormwater, restoration of wetlands, habitat improvements. Stands in their own,"caught between" two Great Lake (Ontario and Erie).

Jen Nalbhone- GLU- Invasive Species

- Comprehensive approach to great lakes restoration. New approach. Message is you have to be an advocate for all systems, wetlands, invasive species, etc.
- Background: "hammered" with invasive species 180 IS. Most recent, VHS Fish Virus. Have to keep out of upper lakes, how?
- Introduced by ballast water, about 65%. Regulating ballast. Importation and trade another focus. Imported fish species.
- Federal initiatives and approach is comprehensive because many different things need to be done. End of 2002, bill introduced to reauthorize existing legislation: addressed ballast water vector, improve screening, stop Chicago sanitary ship canal, research, monitoring, rapid response. Unfortunately, this bill hung out in committee for many sessions. Raised with modifications. We were unable to get it passed leadership. Senate, not going to pass invasive species legislation. House, private property rights issue so won't touch it.
- GLRC Recommendations: very good. Identified funding allocations, new authorizations, new legislations. Number one rec: comprehensive legislation needed that addresses all vectors on federal levels. Realized that this was not 100% guarantee, federal government dragging feet. So they said study the alternatives. Studies option of transshipment (would we have access global markets any differently, knowing what we know now would we have done differently). Trade with partners in Canada and others around the World.
- Other alternatives such as shoreside. Alternatives studied if legislation doesn't pass by federal government.
- Cleveland-prioritized. Result: development and passage of comprehensive legislation, CARP barrier properly authorized and funding. No bob-heavy with good with not a lot of ballast water-still have invasive species, but exempt from regulations. LOOP HOLE. Need to close.
- With new congress, NGO's drafting a new ideal bill to reintroduce, comprehensive. Restoration bill should be reintroduced.
- State level: states "take up the flag of invasive species". Michigan passed a state bill, so January 2007 regulations and permits for ballast waters. Happening on the west coast. "Putting a band-aid on a gaping wound." It's helping and lighting fire under federal government. Encouraging states to do something, puts pressure on federal government since 25 different state bills is confusing for ships. Federal legislation would fix this.

Chris Grubb-NWF- Priority Setting for Coalition

- Great Lakes Day in DC. 100 advocates flown into DC for the day. Lobby Day and training.

- NWF- over 90 groups part of the coalition. No charge. Form in packets to sign up. Not just conservation and environmental groups-zoos and aquariums. Local governments and diverse partners and allies. Agricultural groups, etc.
- Mission to get restoration plan in place-GRC strategy is a wonderful blueprint for that goal.
- Harder part-getting the strategy implemented. Largely means getting that funded.
- Priority setting:
Two-pronged approach:
 - 1) Authorization and legislation passed and boost funding levels
 - 2) Get the money appropriated. Money is usually granted, but not appropriated at an adequate amount. Usually \$500,000 actually allocated.
- On the ground projects:
Help coalition set priorities
 - 1) Annual Conference-this year in Cleveland, OH
 - 2) Funding
- Recommendations: boost funding levels for legislation, build inventory for projects (i.e. group of scientists that authored GL paper for protection www.healthylakes.org)
- Not ranking projects-building inventory projects that help put a face on key federal programs: i.e. submit projects online for ontheground restoration projects. Initial map of what has been received so far. A long way to go. Hope is to fill in map over time and demonstrate to congress that there's a lot of work that needs to be done so appropriation levels will increase. Used also for accountability tool.

Mayor Robert Duffy- City of Rochester

- Impacts as a city- Erie Canal & Lake Ontario
- Retrouted 2 streams polluting Lake
- Hemlock & Canadise Watersheds- city owned – never sold
- Preserving open space & green space
- Green Team- alternative fuels
- Green buildings
- Rochester wants to be involved
- Rochester (Duffy) sent letter in support of Compact
- Duffy involved in GL issues

Maggie Brooks – Monroe County Executive

- City & County collaborated to reopen Durand Eastman Beach
- What can Rochester do to make Basin better?
- Just reopened new section of riverway trail – largest span reopened of trail over water in NA

Peter Anin- GL Water Wars

- Thesis: GL entering period of water tension based on water scarcity. Need binding agreement
- Only 1% of earth's surface is drinkable
 - 1 billion people lack access to water
 - 2 million annually die from scarcity or contamination
 - 2/3 will face water shortage by 2025

- Aral Sea-
 - Once 4th largest inland sea
 - 1960 – Soviets diverted water stream to create farmland
 - Water was once 45 ft deep
 - Was large fishing port
 - Took 5 hours to get from old port to new water line
 - Lost 95% of volume & 70% of surface area
- Those people who say large lakes are invincible are wrong- cannot be mismanaged
- GL- map from Council of GL governors
 - 18% of global fresh water
 - Enough volume to cover lower 48 in 9.5ft of water
 - Only 1% is renewable
 - Nourishes 40million people in US & Canada
 - Regional economy- 3rd largest- 2.2trillion
- Diversions since 1825
 - 8 interbasin diversions
 - 6 intrabasin diversions
- Illinois Diversion at Chicago – 1900
 - Lowered Lakes Michigan & Huron by 2.5 inches
 - Max capacity 10000 cfs
 - Current size is 3200 cfs
 - Controlled by US Supreme Court decree because MO sued before canal opened
 - MI, WI & NY all sued because water should be flowing through the states
- 1909 Boundary Water Treaty
 - IJC will regulate waters
 - Diversions that affect the “natural flow& levels” of water
 - Experts question whether treaty covers Lake MI, hydrological connected to Huron
- Long Lac & Ojoke Diversions (Ontario) – 1940 & 1943
 - Send water into GL Basin
 - Depression era jobs program to log timber from Upper Ontario and send to Lake Superior
 - Ojoke was to provide power during winter
 - Long Lac divers water from Hudson Bay to GL
 - Projects raised Lakes MI & Huron by more than 2 inches
- NAWAPA & Grand Canal- 1960s.
 - Divert water from Pacific NW to send water to American SW.
 - Grand Canal was plan to build dam and turn saltwater into freshwater for SW.
 - These are both natural outgrowths of Am. SW Water Diversions of 30,40 & 50s
- Ogala Aquifer- 1970s

- Because of irrigation water levels have fallen 100ft. Congressional delegation put pressure on Army Corps to divers water from nearby areas. Corps decided to look at adjacent areas very narrowly.
 - Would cost between \$3-30b to divert
- Jonathan Bulkley- 1984
 - Hypothetical Canal from Superior to SD. – 611miles
 - \$27b to move
 - between \$30-50b to move GL water to just the high plains
- Coal Slurry Pipeline- 1981
 - 1900 miles proposed from NY/MT – 42inch pipe
 - \$2.8b project
 - suggesting using Lake Superior water for slurry
 - Eminent domain killed project
- Sporhase v. Nebraska (1982)
 - Groundwater is an article of commerce
 - Nebraska’s limits on interstate water transfers violated commerce clause
 - GL governors felt it affected them
- GL Charter (1985)
 - Nonbinding
 - Diversions & Consumptive uses over 5mg/d required prior notice and consultation
 - Agreed to reach consent and concurrence in water disputes
 - States/provinces agreed to regulated everything over 2mg/d
- WRDA of 1986
 - Required that all GL diversions on U.S. be unanimously approved by all 8 GL governors
 - Binding (only on US side)
 - Legislation with no standard for judging diversion applicants
 - Only applies to diversions
 - Only takes one governor to kill diversion proposal
- Pleasant Prairie, WI – 1984
 - ½ in GL basin & ½ in MI River Watershed
 - WRDA diversion request
 - Village is on Lake MI
 - Radium in groundwater
 - Requested 3.2mg/d “temporary diversion”
 - Return flow by 2009
 - 2 governors never responded
 - MI sent approval letter from head of DNR
- Lowell, IN- 1992
 - Fluoride in groundwater
 - 5 mi outside of basin
 - 1.1mg/d
 - consultation- MI & NY resisted
 - CGLG tried to broker a deal
 - Gov. of MI (Engler) vetoed Lowell’s proposal

- Only diversion ever vetoed
 - Regional concerns over WRDA process
- Mud Creek, MI- 1992
 - Charter- consumptive use case
 - Ag irrigation project
 - 8.6 mg/d to 14.4mg/d
 - Consult in MI
 - Consensus not achieved
 - MI went ahead despite objections
 - For crops already in surplus
 - Minnesota, Illinois, Indiana, Ontario & Toronto all objected
- Akron, OH- 1994
 - WRDA diversion project
 - Straddling community
 - No public hearing
 - 48mg/d with complicated return flow
 - Diversions went through and lost water rights to suburbs
- The Nova Group- 1998
 - 158mg to Asia
 - Canada pressured Nova to withdraw
 - Ontario & Canada both passed legislation to regulate GL Diversions
 - US Response was Annex 2001
- Waukesha, WI – 2006
 - Outside of GL Basin
 - 20mg/d with no return flow
 - May sue for water
- Climate Change
 - Could raise lake levels by 1 foot or cause to drop by 5 feet, in addition to 6 foot natural fluctuations
 - Most experts believe lake levels will fall
 - Will increase regional water tension
 - Increased tension could make adoption of a new water management system even more difficult
- GL Basin entering tension
 - Need binding agreement
 - Current system dysfunctional
 - Climate change exacerbates tensions
 - Compact is best chance the region has to protect its globally significant waters

