NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF

ENVIRONMENTAL PERMITS

& POLLUTION PREVENTION SAMPLER

Pollution Prevention

- Lead the agency Mercury task force
- Lead the P2CA council
- Foster green chemistry in NYS manufacturing
- Advise on green cleaning
- Educate on P2 in schools
- Promote P2 in business, government, institutions
- Administer Green Buildings Tax Credit program

Environmental Protection and Economic Viability

- Administer the State Environmental Quality Review Act (SEQR), leading to state and local agency decisions that balance social, economic, and environmental considerations
- Evaluate environmental impacts resulting from proposed projects, and help guide the formulation of viable alternatives and mitigation measures
- Coordinate energy planning for the agency and manage the review of energy generation and transmission projects

Regulatory Review

- Evaluate project proposals and existing facilities for compliance with Environmental Conservation Law and the Codes, Rules and Regulations of the State of New York
- Employ Geographic Information Systems (GIS) technology in systematic screening of proposed projects, for potential impacts to cultural and environmental resources
- Employ permits to help manage activities that are potentially detrimental to the environment

Multi-disciplinary Coordination

- Coordinate environmental review of projects with Department programs and other agencies.
- Develop partnerships with department programs, state/federal agencies, local governments and citizens groups
- Identify early trends of development and resource impacts
- Synthesize comprehensive Department positions on issues

Information/Outreach/Compliance Assistance

- Provide "one-stop shopping" for all NYSDEC permits required for a project and pollution prevention assistance across Department programs
- Provide training and guidance to all state/local agencies, project sponsors and the public about the State Environmental Quality Review (SEQR) Act
- Conduct pre-application meetings to improve a project sponsor's understanding of the regulatory requirements.
- Promote pollution prevention practices by providing technical assistance workshops and guidance materials

imely Decision Delivery

- Track internal and external action on permit applications
- Respond to 5-day letter demands on late actions
- Convene pre-application meetings that result in avoidance or significant reduction of proposed project impacts and
 associated project delays
- Manage compliance with the Uniform Procedures Act

Sustainability and Innovation

- Recognize leaders who are solving environmental challenges by using innovative and environmentally sustainable practices
 or creative partnerships
- Ensure renewable energy generation projects are sustainable enterprises
- Advance the use of sustainable business practices including renewable energy, green chemistry, green cleaning
- Use the environmental review and permit processes to help stem emerging trends that are environmentally degrading (e.g. habitat/stream fragmentation)



Division of Environmental Permits and Pollution Prevention Central Office



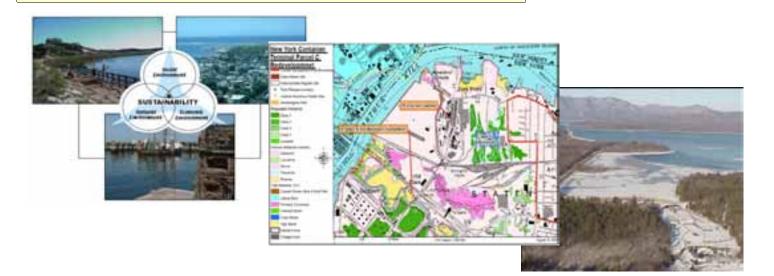
Permit Management (UPA)

Screen projects for sensitive environmental resources and jurisdictions, lead project review teams, track progress, ensure public participation



Environmental Review (SEQR)

Conduct environmental assessments and coordinate reviews to minimize impacts and balance social, economic and environmental considerations.





Division of Environmental Permits and Pollution Prevention Central Office



<u>Pollution Prevention and Sustainability</u> Outreach, partnerships, sponsorships, and support for innovative green technologies



<u>Energy Policy/Project Review</u> Work with other agencies to achieve goals for increasing renewable energy while maintaining system reliability and fuel diversity







SEQRA Reviews, Cultural Resources, Natural Heritage, Coastal Consistency, Coordination and Environmental Outreach: Region 1 Permits performs outreach and environmental impact coordination with hundreds of county, town and village governmental entities in the region as well as a number of federal agencies.

The Region is home to a diversity of rare, endangered and threatened species, such as the Eastern Tiger Salamander (Shown below) which is found only in the Region. Region 1 Permits plays an active role in helping to protect these species and is often the first line in their defense. The Region also has a wealth of Native American cultural resources and the earliest English-established Town in the State is located here. Permits ensures the protection of these resources through active implementation of State Historic Preservation procedures.



Freshwater Wetlands: Region 1 Permits staff identifies projects that may affect freshwater wetlands and assists in the protection of those wetlands some of which are habitats for endangered species.



Coastal Erosion: Region 1 Permits frequently assists and provides guidance to communities and citizens in protecting against erosion from devastating coastal storms. The barrier islands off Long Island benefit from Permits' coordination and participation with other involved agencies to develop comprehensive strategies to protect these natural areas.





Tidal Wetlands: Region 1 Permits plays a significant role in recognizing regulatory trends in the marine environment and protecting the vast area of tidal wetlands surrounding Long Island. This in turn helps support active tourism and fishing industries which depend on healthy and protected maritime resources.









Solid and Hazardous Materials: Region 1 Permits assists in renewing permits, issuing new permits and supporting enforcement investigations for a number of operating landfills, transfer stations and resource recovery plants to maximize efficient solid waste processing and promote recycling.



SPDES: Region 1 Permits assists in mitigating impacts from a large number of sewage treatment plants and other point sources. These are closely evaluated for impacts to the groundwater quality of our sole source aquifer system and marine surface waters, some of which are state and federally designated estuaries.



Mined Land Reclamation: Permits successfully handles highly controversial mining applications for expansion of existing sand and gravel mines or the creation of new mines, many located in the State-designated Long Island Central Pine Barrens region. Mined materials are vital for Long Island's construction and transportation industries.



Air Resources: Region 1 Permits manages a large volume of Title V permits for power plants, manufacturers, resource recovery plants and landfill gas flares. Efficient permit application management helps protect air quality while the region maintains viable economic development.



Long Island Wells and Water Supply: Permits identifies and helps address potential impacts to Long Island's federally designated sole-source aquifer. Impacts to water quality and quantity from development projects and water takings are evaluated and either eliminated or reduced to acceptable levels.





Region 2 encompasses the five boroughs of New York City: The Bronx, Brooklyn, Queens, Staten Island and Manhattan. A staff of ten (10) is divided into five groups concentrating in the following program areas: natural resources, water, air, solid and hazardous materials, and major projects with strong environmental justice components. Permits staff members attend meetings and participate in work which includes environmental regulatory topics of interagency task forces, committees and other groups throughout the city, as well as those called by levels of local government including the Mayor's office, borough presidents and community boards.



Long Term Projects: Region 2 has many projects that will take years or decades to complete, which brings up complicated permitting issues due to the length and multiple phases of construction. Projects include the proposed Fresh Kills Park (left, 40+ years), Newtown Creek WPCP Upgrade (right, ~15 years), Paerdegat Basin and Alley Creek CSO Facilities (~8 years), Water Tunnel #3 (50 years), and the Cross Harbor Tunnel (20 years) among others.



Dredging:

Staff coordinated interagency meetings to facilitate permitting of the NY/NJ Harbor Deepening by the US Army Corps, and has also worked to assist finding locations to accept PDM (Processed Dredge Material) as fill in NYS projects, including the capping of the Fresh Kills Landfill, the proposed redevelopment of the former GATX oil terminal, and other sites in the Region and State.



Freshwater Wetlands and Bluebelt Projects: The Staten Island Bluebelt is a storm water management system utilizing natural and constructed freshwater wetlands to convey and treat stormwater in a more natural and cost effective manner than traditional storm sewers. The Region has permitted several of the constructed systems, which include unique permitting challenges due to their geography and constraints being located in a fast growing county in New York State.









NYCDEP WPCP's and upgrades:

1,770,000,000 gallons per day capacity at the14 WPCP's in Region 2. Nitrogen reduction requirements will lead to further upgrades to the treatment plants (above), which will need multiple permits. The CSO consent order also mandates upgrades and new construction, most of which will require various permits.



Tidal Wetlands:

Numerous waterfront development projects throughout the city, especially on Brooklyn and Queens side of the East River, require Tidal Wetlands and Protection of Water permits, as well as Water Quality Certifications.

Restoration Projects:

There are many restoration projects in Region 2, including mitigation due to impacts of development as well as habitat restoration projects. These include Bronx River habitat restoration, mitigation associated with construction of CSO Facilities located in Tidal Wetlands, Flushing Airport, Jamaica Bay, Pelham Bay, and the Fresh Kills landfill site.

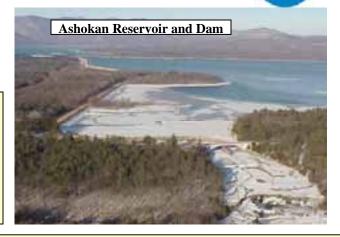


Solid Waste:

Solid Waste facilities are often located in Environmental Justice communities. Applications for new facilities or major modifications are subject to the Commissioner's Policy on Environmental Justice and Permitting CP-29. A major set of applications before the Department and being reviewed in conjunction with this policy is NYC Department of Sanitation's four Marine Transfer Stations, proposed as a primary means to remove garbage from NYC, each processing 4,290 tons of material a day. CP-29 affords the communities the opportunity to effectively convey their concerns on the potential impacts of the projects in neighborhoods that may be already inundated with pollution generating facilities.



Region 3: The 7 counties of Region 3 straddle the Hudson River and cover approximately 4600 square miles, an area the size of Rhode Island. It stretches east to Connecticut, Massachusetts, and the Long Island Sound, west to Pennsylvania and the Delaware River, south to New Jersey and New York City, and north to the Catskill Mountains and Catskill Park.



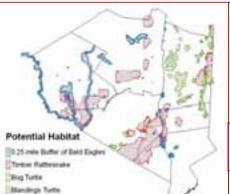
NYC Watershed: Most of New York City's 19 reservoirs are in Region 3, drawing from the Croton, Catskill, and Delaware River watersheds. Permits staff work with the NYC Department of Environmental Protection on permitting various projects to protect water quality. Permits has a dedicated watershed coordinator to facilitate inter-agency communications and obligations under the MOA/MOU and manage their permit applications.



Protection of Waters: Region 3 is water rich with many protected streams and waterbodies. Over forty percent of the 1,300 applications received yearly are for projects involving excavation and fill, disturbance to bed or banks, and docks. Significant resources include the fly-fishing rivers of the Esopus and the Beaverkill and the Hudson River estuary.

Freshwater Wetlands: There are over 112,000 acres of mapped wetlands plus many more eligible unmapped wetlands. Regionally significant wetlands include the Bashakill and Great Swamp as well as the heavily developed area around Stewart Airport.





Forty-two percent of applications received in 2005 were for wetland disturbances. Development continues to gnaw at these resources, many of which provide habitat for species of concern.

Endangered, Threatened, and Protected Species



Mega-development and Suburban Sprawl: Numerous large subdivisions and five casino/resort developments are proposed throughout the region. Permits is involved in the many applications these generate, including the Natural Heritage and cultural resources concerns, the environmental review, and the public concerns raised by these large-scale projects. This development results in cumulative stormwater impacts as evidenced by number of general permits.





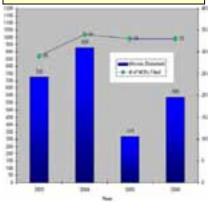
Waterfront Redevelopment and Brownfield Remediation: Much of the Hudson River Waterfront is being redeveloped from abandoned industrial uses to mixed use. Permits staff are involved in the reviewing applications and providing input on remediation proposals. Of particular concern are submerged aquatic vegetation beds and impacts to them from dredging and marinas.





Mining/Residential Interaction: There are 189 active, permitted mines in Region 3. These can generate public opposition and controversy, especially for those near residences. Permits staff get involved in responding to public comments, participating in hearings, and leading the environmental review.

The chart below shows the number of Notice of Intents filed from 2003-2006 for coverage under the Stormwater General Permit in a single Region 3 watershed, the Fishkill Creek, which is ~130,000 acres in size. These projects represent proposed disturbance to over 2500 acres or approximately 2% of this watershed in just 4 years. The area also contains 138 NYS Regulated Freshwater Wetlands.





Woodbury Creek Watershed Initiative: The Woodbury Creek and its tributaries have been identified as a resource of special concern. This watershed includes numerous Trout and Trout Spawning streams. Prompted in part by two large subdivision proposals that will add wastewater from almost 700 new residential units to the Watershed, stream sampling has already shown a decrease in water quality and the Department is developing a water quality protection strategy. Staff are involved with permitting and environmental review of projects. Suspected causes of impact include nutrient loadings from existing treatment plants and storm water runoff from increasing areas of impervious surface, with excessive salting of large parking lots during winter months at the popular Woodbury Commons outlet mall also a contributing factor.



The central location of the watershed, only minutes from a busy commuter rail station and an hour's drive from NYC, makes this an area of interest for many developers. The situation in the Woodbury Creek Watershed illustrates well the challenges faced in balancing the protection of valuable resources in the face of ever-increasing development pressures and the potentially damaging effects of cumulative actions.





Region 4 boasts a number of unique resources, including the Albany Pine Bush Preserve, the northern portion of the Catskill Forest Preserve, a portion of the New York City Watershed, and portions of four major river basins: 60 miles along the Hudson River Basin, 60 miles along the Mohawk River Basin, 100 miles of both the East and West Branches of the Delaware River, and 40 miles along the Susquehanna River Basin.

Flooding:

Region 4 was faced with a large amount of rainfall between June 23-29, which created a number of catastrophes throughout the region. Some parts of Delaware County experienced almost 15 inches, while areas in Greene County calculated 12 inches of rain. The Division of Permits worked overtime answering phone calls, visiting sites, and issuing emergency permits

June 2006 Flood Statistics

Calls Received:	800	plus
Sites Visited:	1440	plus
Permits Issued:	1200	plus



Shown left is Unadilla, Otsego County where Interstate 88 collapsed due to the erosion of an underpassing stream.

Shown right the devastation of a local road in Delaware County, with a detailed view of the flood flowing down the street.



Mining Permits: Region 4 contains a total of 589 permitted mines affecting more than 9,000 acres of land of which approximately 2,000 acres have been reclaimed.







Electrical Generating Plants:

The **Athens Generating Plant** is a 1,080 MW combined cycled generating plant located 30 miles south of Albany in the Town of Athens in Greene County. It was the first plant built under the state's Article X power plant law and was the first to require air cooling technology to protect the Hudson River aquatic resources. The plant was approved in June 2000, and went into commercial service in 2004.

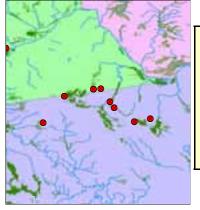


Stormwater Pollution:

Division staff increasingly respond to concerns from the public about stormwater pollution. Stormwater flows from rooftops, over paved areas, bare soil and lawns - picking up litter, sediment from construction activities, pesticides and fertilizers, toxic chemicals from automobiles, bacteria from animal waste and other pollutants. Stormwater can cause unwanted erosion in many places. Permits' staff work closely with division of water staff to ensure that an effective Stormwater Pollution Prevention Plan is in place during all phases of project construction.

The picture right illustrates storm water runoff flowing down a hill, eroding the soil beneath it.

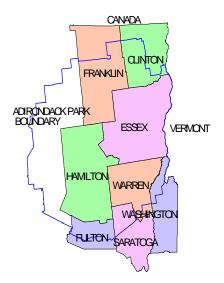




Wetland Protection:

The Region has begun a program to ensure the long term protection of wetlands by mapping deed restricted wetlands into Arc View GIS (Geographical Informational System). This mapping system (shown to the left) will make it easier to identify sites which contain deed restricted wetlands which will be compared against new proposals which may potentially impact these same wetlands.





Region 5 Primer: Region 5 encompasses 8 counties, includes ¾ of the Adirondack Park, is roughly the size of the State of Vermont and borders both Vermont and the Province of Quebec. The Region features numerous unspoiled lakes, ponds and streams as well as the High Peaks, the Upper Hudson, Lake Champlain and Saratoga County – one of the 3 fastest growing counties in NYS.



Riparian Areas (#1): The shorelines of Region 5's lakes, streams, rivers and wetlands are under ever increasing recreational and developmental pressure. Permit staff manages the review of all regulated activities in Riparian Areas, analyzes trends and advocates for regulatory changes, program guidance and policy, as appropriate.



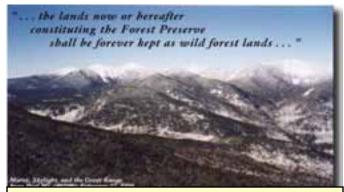
Minerals: Region 5 is home to 381 active mines that provide non-renewable product for the construction industry as well as rare and unique product for national and world-wide markets. Permit staff manage the review of all mining applications, coordinate with the Adirondack Park Agency (APA), conduct noise and visual analyses; and participate in hearings.



Riparian Areas (#2): This aerial view of Mirror Lake and Lake Placid (scale = 1:15,000) shows a Riparian Area that is being "loved to death." Permits staff is monitoring this trend and exploring remedial options.







Adirondack Park/Forest Preserve: Permitting within the Adirondack Park is a challenge whether the activity involves a mine expansion, or a second home resort. Permits staff routinely coordinates with Natural Resources staff, APA and NYS DOT; implements the WSR Rivers Act on State-owned lands; supports the Regional Director on permit and policy matters; implements Sec. 35a of Navigation Law; and analyzes permitting and development trends within the Park.



Hydropower: An abundance of flowing water supports electric generation at over 40 hydropower sites within the Region. Collectively, these sites produce over 300 MW of renewable power. Permits staff coordinate with central and regional office natural resources and legal staff, state and federal resource agencies, stakeholders and FERC prior to issuing Water Quality Certificates for each site. Permits staff also share compliance responsibilities for the Region's hydropower sites.



Water Supply: Water Supply projects are a "bellwether" for real estate development. Region 5 Permits staff has handled 67 water supply applications over the past 2 years, the vast majority in Saratoga County. This is a significant amount in comparison with the rest of the state.



Luther Forest Technology Campus (LFTC): As the single largest industrial development project in the Region in the past 50 years, the LFTC is an example of a significant permitting action by the Region. Like many large projects, several DEC permits are required – involving air, water and land resources. Permits staff is responsible for managing the Department's review, ensuring effective public participation; and briefing Executive staff.





Region 6 is one of the largest regions in the state. Region 6 encompasses 8,300 square miles and includes five counties: St. Lawrence, Jefferson, Lewis, Oneida and Herkimer. Approximately 550,000 people reside within the region.

ADVANCING SUSTAINABILITY & INNOVATION



GODFREY POINT SIGN SHOP AND FIELD HEADQUARTERS

Region 6 completed the first Environmental Management System at a DEC facility in New York State. The EMS team was comprised of Region 6 and Central Office staff.



The facility produces signs for statewide use and does work for every department program. The facility produces approximately 100,000 screen printed signs and approximately 1,000 wooden signs with vinyl lettering annually

RENEWABLE ENERGY



Forty-four percent of New York State's hydroelectric projects are located in Region 6. Region 6 staff is involved in the licensing of new facilities and the re-licensing of existing facilities with the Federal Energy Regulatory Commission (FERC).

The St. Lawrence – FDR Power Project produces 960 MW. The region worked on the project re licensing for a six year period concluding with a 50-year license renewal in 2003.

It. Lewtonce-Prasklas D. Boosevelli Power Project -



Maple Ridge is the largest wind farm east of the Mississippi River. It is located on the core of Tug Hill in Lewis County. The wind farm produces enough electricity to power 98,000 homes (300 MW).

Five additional wind farms have been proposed and are under review by the region.





ENVIRONMENT VS. DEVELOPMENT



Region 6 Permits Staff attempts to balance environmental protection and economic development by designing permit conditions allow growth but are protective of the environment.

Staff works with the public, non governmental organizations, state and federal agencies to produce environmentally sound projects.

COMPLIANCE AND TECHNICAL ASSISTANCE

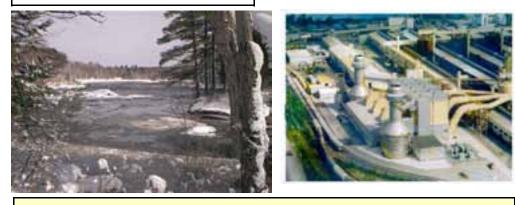
Region 6 Staff conducts pre-application meetings, provides information on permit requirements, modifications and renewals to existing operating permits.

Staff also provides State Environmental Quality Review ct (SEQRA) information to the public and applicants.

Staff also acts as gatekeepers for inquiries and requests for information to the regional office.



PROGRAMS & PARTNERSHIPS



Region 6 Staff coordinates with Environmental Quality program staff to issue numerous permits for facilities such as Alcoa in St. Lawrence County.

Staff also forms partnerships with other entities such as the Sauquoit Creek Intermunicipal Basin Commission to manage flood control and public access and enjoyment of the resource.









Onondaga Lake Clean-Up: Region 7 is in the process of cleaning up this highly polluted lake, by separating out the combined sewer overflows (CSO). SPDES and Protection of Waters Permits required.







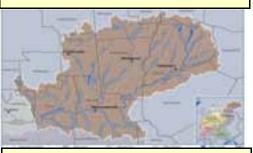
Erie Canal National Heritage Corridor: Development of preservation & mgt plan; Erie Canal Greenway: This is a Regional approach to land use planning, including permits staff serves on the NYS Canal Corp Interagency Task Force.



Aquatic Pesticides Permits: For the control of invasive aquatic species such as water chestnut and Eurasian milfoil.



Brownfield Sites: Re-use of previously used/abused sites. Project Management & coordination by Permits for Air Title V, Solid Waste and SPDES Permits. Shown here is Solvay Paperboard, Syracuse.



Susquehanna River Basin Commission: Covers part of NYS and Pennsylvania. Permits for water supply & SPDES; flood plain mgt & protection; water quality; watershed protection/mgt; recreation, fish & wildlife.



Mined Land Reclamation: Mining is a vital part of the states' economy, Region 7 has 359 active mines, including the states largest: Cargill Salt Mine (13,417 acres). Shown above is the 5th largest above ground mine: Hanson Aggregates - Jamesville Quarry.







Region 8 Overview:

Comprised of 11 counties in Central and Western NY, Region 8 stretches from the shores of Lake Ontario with its drumlins, lake plains and eight Finger Lakes to the hills and valleys of the Southern Tier and the Pennsylvania Border. Encompassing 6,294 square miles, the Region is larger in area than the state of Connecticut.





Storm water Management & Water Quality Certifications: Properly designed, constructed and maintained storm water & pollution prevention plans are a critical component of most all Natural Resource construction permits. Permits' staff work closely with Division of Water staff to ensure that an effective Storm Water Pollution Prevention Plan is in place during all phases of project construction. In addition, staff monitor compliance, and require prompt corrective action as necessary. For those projects where a Corps of Engineers Water Quality Certification (WQC) is needed for a discharge to Waters of the United States, applications are generally reviewed, and WQC's issued, by Permits' staff. Compliance must be demonstrated with established effluent limitations, water quality and thermal discharge criteria, as well as the Federal Water Pollution Control Act, for issuance of a water quality certification.



Air Resources Permitting:

With the corporate home of Eastman Kodak Co. in Region 8, along with several other major industrial corporations such as IBM, Xerox, and Corning Glass, to name a few, Permits and Division of Air staff have a significant obligation to provide timely and dependable air permitting services. The Region 8 Kodak staff team was the first facility-based DEC regulatory team in the state





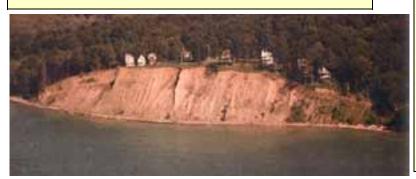


Stream Protection & Freshwater Wetlands: The majority of permit applications received in Region 8 are Protection of Waters-related projects. The Region has close to 360 miles of shoreline associated with Lake Ontario and New York's Finger Lakes, as well as a rich and extensive wetland resource, all of which contribute to a significant application workload.



Mined-land Reclamation:

In Region 8, with roughly 321 sand and gravel mines and hard rock quarries currently under permit, Permits' staff are actively involved in application reviews for new mines as well as renewals and modifications for existing sites.





SEQRA Reviews & Environmental Outreach:

By virtue of its geologic history and topography, Region 8 is a leader statewide in its abundant wind resources and its potential for siting new wind power facilities, like this one in Madison County (Region 7). Regional Permits' Staff are working cooperatively with Central Office energy staff in outreach efforts with local governments, NGOs and other environmental advocacy groups in the DEIS and SEQRA reviews for at least a half dozen wind farm projects currently pending in Region 8.

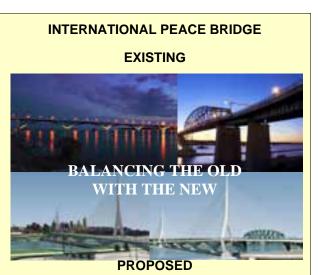


Solid & Hazardous Materials - Part 360: Permits' staff are actively involved in a number of landfill expansion projects, including Seneca Meadows, Inc., the largest operating landfill in New York. Permits' staff must work effectively and professionally with applicants, consultants, citizen groups and other stakeholders to ensure that these often controversial and contentious but important projects are successfully concluded.

Coastal Erosion Permitting:

The entire northern edge of Region 8 is Lake Ontario shoreline, and is mostly within the regulated coastal area. Permits' staff review applications and issue permits to preserve and protect natural shoreline features. An effective permitting program must be supported by a timely and conscientious compliance and enforcement effort to be successful.





Environmental impact statement review continues on replacement of construction of an additional Niagara River International Peace Bridge. The bridge design and operation must achieve: 0 water level change, minimized impact to migrating birds and fish, provide spill containment, improve traffic flow, enhance Homeland Security and meet controversial SHPA and aesthetic considerations. Permits staff work with other stakeholders on bringing the environmental review to conclusion.



1. Scajaquada Pathway – Phase III

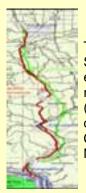
- 2. Squaw Island Park
- 3. Tow Path Park

REURBANIZATION AND WATERFRONT DEVELOPMENT

- 4. Cotter Point Development
- 5. Erie Canal Harbor
- 6. Inner Harbor Parking Facility
- 7. Erie Canal & Great Lakes Museum
- 8. Bass Pro Outdoor World Store
- 9. Times Beach Nature Preserve
- 10. Boat Harbor
- 11. Port-Outer Harbor Trail Buffalo River Fest Park RiverWright Ethanol Plant
- 12. Outer Harbor Greenbelt Buffalo Lakefront Development
- 13. Tifft Street Trail
- 14. Buffalo Lakeside Commerce Park
- 15. Southtowns Connector
- 16. Seneca Bluffs



The proposal to locate an upstate Energy czar in Buffalo, the Niagara River Greenway initiative and funding from new state brownfield remediation grant programs will invigorate urban renewal efforts in Region 9. Brownfield redevelopment/smart growth is particularly important in Buffalo, Lackawanna and Niagara Falls and largely focused on Lake Erie-Niagara River waterfront properties, formerly used for industry and chemical production. Soil contamination/remedial actions and federal, state and local regulations (Coastal Management and SHPA, etc.) complicate redevelopment efforts. Permits staff are conducting pre-application meetings for many of these projects



Proposed NYS Route 219 Extension

This project has been identified as the largest new highway proposed in New York, reaching from Springville to the Pennsylvania border. The project has been reviewed under a comprehensive environmental impact statement by federal agencies and the NYSDEC staff have made recommendations on how to minimize impacts to streams, federal and state regulated wetlands, (including wetland creation where necessary), and wildlife travel corridors (to reduce deer - car collisions). As a result of the review the project will also feature a high level bridge crossing of Cattaraugus Creek and incorporate 2 million waste tires as a disposal alternative under the NYSDEC/NYSDOT partnership initiative.





75% of Grand Island

LAKE PLAIN WETLAND PROLIFERATION

Lake plain wetlands are rapidly expanding in Region 9, especially in Erie and Niagara Counties. The Department presently regulates 123,000 acres of wetland in the 6 county Region.

There are profound economic and social impacts related to this expanding natural resource, which among others, include: land valuation, wetland predictability for developers, building construction problems related to soils and California Encephalitis and West Nile Virus, which are mosquito borne diseases. Permits staff work closely with technical staff to ensure that the wetlands are protected. Amendment to NYS Freshwater Wetlands Map for Nagara County Tonawanda East Quadrangle, Map 15 of 18 Addition of Class 2 Wetland, TE-36



New Wetland TE-36 (136+/- acres)

ALTERNATIVE POWER INITIATIVES

Permits staff have reviewed and evaluated 14 projects involving the construction of over 800 wind powered turbines to produce 1200 megawatts of electricity. The proposed tower locations are concentrated along inland ridges and escarpments and the shoreline bluffs of Lake Erie and Lake Ontario. The comprehensive interdisciplinary services will involve preparation of environmental impact statements to consider, among other environmental concerns: aesthetics (lighting, shadow and flicker effects), safety (lightening strikes, fall zone), migratory bird routes and connection to existing power line systems.





CLEAN COAL POWER INITIATIVES

Review of the proposed new 43 megawatt Jamestown Board of Public Utilities "clean coal" circulating fluidized bed power plant (pictured) has created local controversy. While it would greatly decrease existing air emissions; because of global warning concerns, environmental groups oppose this project as they believe it is unnecessary and outdated technology.

NRG Huntley Power Station in the Town of Tonawanda, Erie County has received a \$1 billion grant for a clean coal demonstration plant that would utilize ground containment of CO_2 to reduce greenhouse gas emissions. This project will undergo environmental review lead by Permits' staff.