

# Tanners Pond Environmental Center

Nassau County Stormwater Storage Basin 232

**Robert M. Alvey, P.G.-Founder & President Emeritus**

2012 Watershed Science and Technical Conference  
NY Water Environment Association  
West Point, NY

# Who IS Rob Alvey?

- Senior Geologist – USEPA Region 2 (Superfund)
- 2011 Assistant to EPA Regional Administrator
- Former co-chair - EPA “Groundwater\*” Forum
- Professor – Geology, York (CUNY) College
- “Volunteer” Founder and President emeritus, “Garden City Bird Sanctuary, Inc.”
- Former Nassau County hydrogeologist
- NYWEA member

\*Yes, “groundwater” is a one word term. Sign my letter of support.

# Why is a Bird Sanctuary at NYWEA??

- Nassau County is a suburban watershed
- Long Island is a designated “Sole Source Aquifer”
- The GCBS is actually a stormwater basin!
- BMPs for stormwater, flooding, and groundwater\* concerns include educating the public and “green infrastructure”
- The GCBS was the initial means to access the basin

\* groundwater is ONE WORD (USGS 2009)

# Hidden Nassau County Suburban Resource – “Sumps”

- **Stormwater storage and/or groundwater\* recharge basins – 2000 on Long Island**
- **Over 600 built by Nassau County since 1930s**
- **2 to 20+ acre excavated depressions**
  - **Inexpensive flood control method**
  - **Primary purpose is to drain roads**
  - **Replenish groundwater\* aquifer**
  - **Chain link fencing, minimal landscaping**
  - **Commercial, industrial and residential**
  - **Ecosystem and green-space value**

\* Groundwater is one word (Associated Press Stylebook)

# Nassau County Stormwater Storage Basin 232, Garden City, NY



# Background

- 1950's -Basin 232, (12 acres), constructed by County
- 1972 - Garden City permit granted for recreational use
- 1992 - GC Environmental Advisory Board formed
- 1993 - Open Space Inventory of Village and basins
- 1994 - Public opinion poll & outreach on basin use
- 1995 - “Adopt a Sump” Volunteer Service initiated
- 1998 - Formal GC Bird Sanctuary Inc. 501©3 formed
- 2010 - Alvey Arboretum initiated at basin
- 2011- Tanners Pond Environmental Center created

# Community Involvement

- Pilot “Dual Use” program in cooperation with NCDPW for community benefit while maintaining original purpose of stormwater basin for drainage
- Almost all work is through volunteer community services
- Continuous outreach is needed to attract volunteers
- Age and skill-appropriate activities need planning
- Working with volunteers is like “herding cats”
- Community volunteer service works

# County Executive Tom Gulotta



**Eve Glasser- Hofstra, Rob Alvey, Tom Gulotta- County Executive  
(All this to give the County Executive a free coffee cup!)**

# Educational Programs



**Professor Betsy Gulotta, lecture at First Anniversary 1997**

# Improvements



**Replacement of chain link gate and fencing with estate style fence, installation of storage sheds, rock walls and benches**

# Boy and Girl Scouts

- Since 1995, 25 boys have completed Eagle projects at the Bird Sanctuary, providing over \$50,000 in community service benefits. Three girls have completed Girl Scout Gold Award projects.
- Giving simple, positive experiences to scouts can put them on the road to success as well as an appreciation for nature.



# Community Involvement

- Volunteers – Scouts, religious institutions, schools, community groups, local neighbors, property- owner associations, court mandated community service, Long Island Volunteer Center referrals.
- Quarterly newsletter to all members and visitors
- Web site: [www.gcbirdsanctuary.org](http://www.gcbirdsanctuary.org)
- Facebook: ‘Garden City Bird Sanctuary’
- Garden City “Patch” – on-line newspaper
- Local newspapers
- Professional organization conferences

# College Connections

- Nassau Community
- Hofstra University
- York CUNY College
- Adelphi University



Adelphi's Freshman Community Action Coalition installing xeriscape garden 2008

# Design Strategies and Outreach

- 2006 Nassau County Environmental Bond \$55,000.00



County Legislator Vincent Muscarella, State Senator Kemp Hannon, Town of Hempstead Supervisor Kate Murray, Boy Scout mom and Rob Alvey 2009

# Installation of Wet Meadows



Innovative Nassau County designed & constructed project to establish an enhanced ecosystem at the site. Completed 2010. Presented at NYWEA 2012 Annual Conference



# Air Photo – GCBS Wet Meadow



# Infrastructure Improvements



- 1997 Original gate and barbed wire covered chain link fencing
  - 2005 New curb, concrete apron and steel Estate style fencing installed
- Grants through NYS Parks, Recreation & Historic Preservation

# Re-landscaping

- Invasive species removal, public education programs
- Preference for native species, “bird friendly” plants
- 150 Memorial trees planted
- Arboretum established 2010
- NYSDEC “Community Tree Planting Urban Forestry” grants
- Outreach – educational programs & lectures



Weed wrench used to remove saplings from Hempstead Plains

# Re-landscaping



Two raised planting beds have been installed. Both are now planted with seedlings of native plants from NYSDEC nursery for use in replanting the site

# Urban Forestry – Community Tree Planting Grants NYSDEC



\$7,500 reimbursable grant from NYSDEC in 2006 enabled replanting of area bordering soccer field and basin with over 30 native trees and shrubs

The GCBS is the only LI non-profit to receive a second NYSDEC grant in 2010 under this program

# Tanners Pond Environmental Center

- The TPEC began to develop in 2011. It includes both the Garden City Bird Sanctuary as well as Alvey Arboretum, but also focuses on research and environmental education and outreach
- Major fund-raising efforts planned
- Village ties with organization increased
  - Board of Directors includes Village Trustee & Adelphi
  - Village Recreation Dept. “Nature Camp”
  - First Annual “**Earth Run**” April 2012

# Water

- A critical need & expense
- Solar irrigation well proposed 2012, estimated cost \$50,000. Funding search initiated
- EPA Superfund Site Groundwater\* Treatment Plant & discharge to basin under design. Estimated cost over \$5,000,000+



\* groundwater is 1 word  
(2012 Webster's)



# Progress Continues



From a hand-made plywood sign in 1997 to a professional resin and steel sign in 2008. Both the Garden City Bird Sanctuary and Alvey Arboretum have formal logos. The student on the far right, Sara Kullins, received a NYWEA scholarship in 2012. She is currently an Adelphi University student and a GCBS Student Director.

# Communications & Collaboration

- Flooding and water quality issues are being addressed on a collaborative basis between government agencies, professional organizations, local communities, and educational institutions.
- Communications are important to address concerns.
- English language evolves rapidly and scientific terms can be confusing for both GCBS and “groundwater.”
- Support my efforts to ensure all agencies use the same term in communications.
- [groundwateroneword@gmail.com](mailto:groundwateroneword@gmail.com)

# For Information

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