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
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
- 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)
Water? 500 gpm discharge!

EPA Superfund site. Initial talks with environmental consultant and community have been positive. Beneficial use of water is a mutual asset. This action is being considered to clean up the groundwater.* (*one word)
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
For Information

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