Using a Citizen’s Wetland Education Workshop As A Tool in Regulatory Compliance

(A “Driver’s Safety” Course for Wetland Violators)

Kevin R. Du Bois, P.W.S., P.W.D
Norfolk Wetlands Education Workshop

**Purpose:**
- Facilitate a common understanding of the purpose and intent of the Norfolk Wetlands Ordinance and how to comply with the Ordinance.
- Remove the “I didn’t know” defense.

**Mechanics:**
- A portion of a civil charge is reduced if violators attend the class.
- Combine concerned citizens, waterfront business interests, anonymous wetland violators. Use peer pressure to persuade recalcitrant personalities
- Costs: Equipment $270, Operating costs (food) $75/class (funded with civil charge money)

Following the workshop, regulators expect better compliance from violators and hope to keep other citizens from unknowingly getting into trouble.
Workshop Components: Classroom

- Importance of Tidal Wetlands
- Review Tidal Wetlands Permit Process
- Restoration Projects
- BES Personnel and Services Provided
I. The Importance of Wetlands
Wetlands in the Landscape

Figure 1. Cross-sectional diagram of a tidal salt marsh (adapted from Tiner, 1984).
In Norfolk, the Virginia Institute of Marine Science reports that between 1993 and 2004, 9.45 acres of wetlands were permanently lost to permitted activities.

Annual average = 0.79 acres per year of permanent wetland loss.
Environmental Quality Functions

- Water Quality Improvement
- Aquatic and Terrestrial Productivity
- Fish and Wildlife Habitat

Ecological Values of Wetlands For Humans (Socio-economic Values)

- Flood Control
- Protection of water quality
- Erosion Control
Pollutant Removal
Recreation
II. Review of Tidal Wetland Permit Process

What is a Wetland?
Mission of the Local Program:
Section 49-5.1

“It is the policy of this Wetlands Board to preserve and prevent the despoliation and destruction of wetlands, coastal primary sand dunes, and beaches within the City while accommodating necessary economic development in a manner consistent with the preservation of these features.”
“The following uses of and activities in wetlands are authorized if otherwise permitted by law…

The construction and maintenance of noncommercial catwalks, piers, boathouses, boat shelters, fences, duck blinds, wildlife management shelters, footbridges, observation decks and shelters and other similar structures, provided that such structures are so constructed on pilings as to permit the reasonably unobstructed flow of the tide and preserve the natural contour of the wetland;
“Any person who desires to use or develop any vegetated wetland and any nonvegetated wetland, within this city, other than for those activities specified in Section 49-3 above, shall first file an application for a permit directly with the wetlands board.”
Typical Projects

Stone Revetment

Timber Bulkhead

Living Shoreline
Typical Violations     Commencement
Without A Permit
Deposition of Fill Material Without a Permit
III. Wetland Restoration Projects in Norfolk

Neighborhood Restoration Projects:
- Larchmont Library
- Fontainebleau Crescent
- Pescara Creek
- Knitting Mill Creek
- Plum Point Park
- Grandy Village, and other projects in the works
Wetland Restoration Projects in Norfolk

It Only Takes a Couple of Growing Seasons!
Wetland Restoration Projects in Norfolk
It Only Takes a Couple of Growing Seasons!
IV. Bureau of Environmental Services Program Oversight

- Wetlands & Dune Permits
- CBPA Review & Approval
- Erosion and Sediment Control Ordinance
- Sunken Boat Removal
- Beach and Dune Management
Primary responsibilities include:

Application receipt
Financial – management of application, civil charge fees and accounts
Application and permit document processing
Critical program support and problem solving

Annette Newkirk
664-4368
Services We Provide

- Courtesy delineations
- Site Assessments For Developability
- Storm Damage Response
- Beach management
- Restoration
- Clean the Bay Day
- Coordination with Norfolk Environmental Commission
- Network with Stormwater Management and Parks and Forestry Departments
Making the Connection in the Field
Making the Connection in the Field
Making the Connection in the Field
Making the Connection in the Field
Making the Connection in the Field
Feedback

8. As a result of this seminar, has your opinion of Environmental Services staff changed? If so, how?

I was not aware of this aspect of the functions of the sewer and rain water till today.

3. Has your opinion changed about the abundance and/or value of tidal wetlands? If so, how?

Yes, I too thought wetlands were what was before your construction, I appreciate learning that wetlands play an important part in the vitality of the water.

8. As a result of this seminar, has your opinion of Environmental Services staff changed? If so, how?

Yes I did not know that anything was being done to filter storm water runoff. The few programs that were shown were good. We need more and faster.

8. As a result of this seminar, has your opinion of Environmental Services staff changed? If so, how?

THE STAFF IS A VERY KNOWLEDGEABLE AND PROFESSIONAL GROUP, THEY HAVE BEEN VERY HELPFUL.

1. Did we provide you with good information on the functions, benefits, and values of tidal wetlands?

Yes, and it was done in such an interesting way. Kevin Dubois was a good instructor because he is truly interested himself, not just doing a job.
### The Numbers...

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Number Of Classes 2004 -2008</td>
<td>8</td>
</tr>
<tr>
<td>Total Number of Class Participants</td>
<td>94</td>
</tr>
<tr>
<td>Number of Violators Who Participated</td>
<td>14</td>
</tr>
<tr>
<td>Ratio of Citizens To Violators</td>
<td>7:1</td>
</tr>
<tr>
<td>Cost to Start the Class</td>
<td>$270</td>
</tr>
<tr>
<td>Cost To Operate The Class</td>
<td>$75</td>
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Train The Trainer

During the Summer of 2006, Norfolk Offered A Free Train The Trainer Class For Interested Wetlands Board Members/Staff

Norfolk provided copies of all PowerPoint Presentations on CD And A Copy of the Citizens’ Wetlands Handbook
The Functions and Values of Coastal Primary Sand Dunes

Kevin R. Du Bois, P.W.S. P.W.D.
Division of Environmental Services
Norfolk
The Geomorphology of Norfolk’s Beaches & Sand Dunes

“Why it is important and how it shapes our shoreline management strategies”
Coastal Primary Sand Dune Regulations (Chapter 49 - Norfolk City Code)
Norfolk’s Coastal Dune System

What Do Citizens Want?
The Big Question.....

Does It Work ????????