

Reviving Rivers, Rebuilding Civilizations

2nd Philippine International River Summit



by

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<http://rowfoundation.org>

Reviving Rivers, Rebuilding Civilizations

BACKGROUND

- Rivers of the World (ROW) Foundation was formed in July 2007. It stemmed from the Yamuna River cleanup effort in India that was ongoing from 1993.

The primary objective of the Foundation includes efforts to Cleanup/Protect highly polluted Rivers in

- ❖ US
- ❖ India
- ❖ China
- ❖ Philippines
- ❖ Nepal
- ❖ Europe
- ❖ Bangladesh
- ❖ S. America
- ❖ Africa, and
- ❖ Other Parts of the World



Reviving Rivers, Rebuilding Civilizations

- A synopsis on *Rivers of the World Foundation* –
 - Where and How we Flow
- Working Hand in Hand With Local Governments and Communities –
 - *Iloilo River, Philippines*



Reviving Rivers, Rebuilding Civilizations

- A synopsis on *Rivers of the World Foundation* –
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- Working Hand in Hand With Local Governments and Communities –
 - *Yangtze River, China*
 - *Barak River, Silchar, India*



Reviving Rivers, Rebuilding Civilizations

- A synopsis on *Rivers of the World Foundation* –
 - Where and How we Flow

■ Countries Where we Currently work

- China
- India
- Nepal
- Philippines
- United States



Some of our project sites



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- What is a River? Think about it ...

River Reflects life of all plants and animals in its watershed
through Interactions and Variations in its Endless Ripples

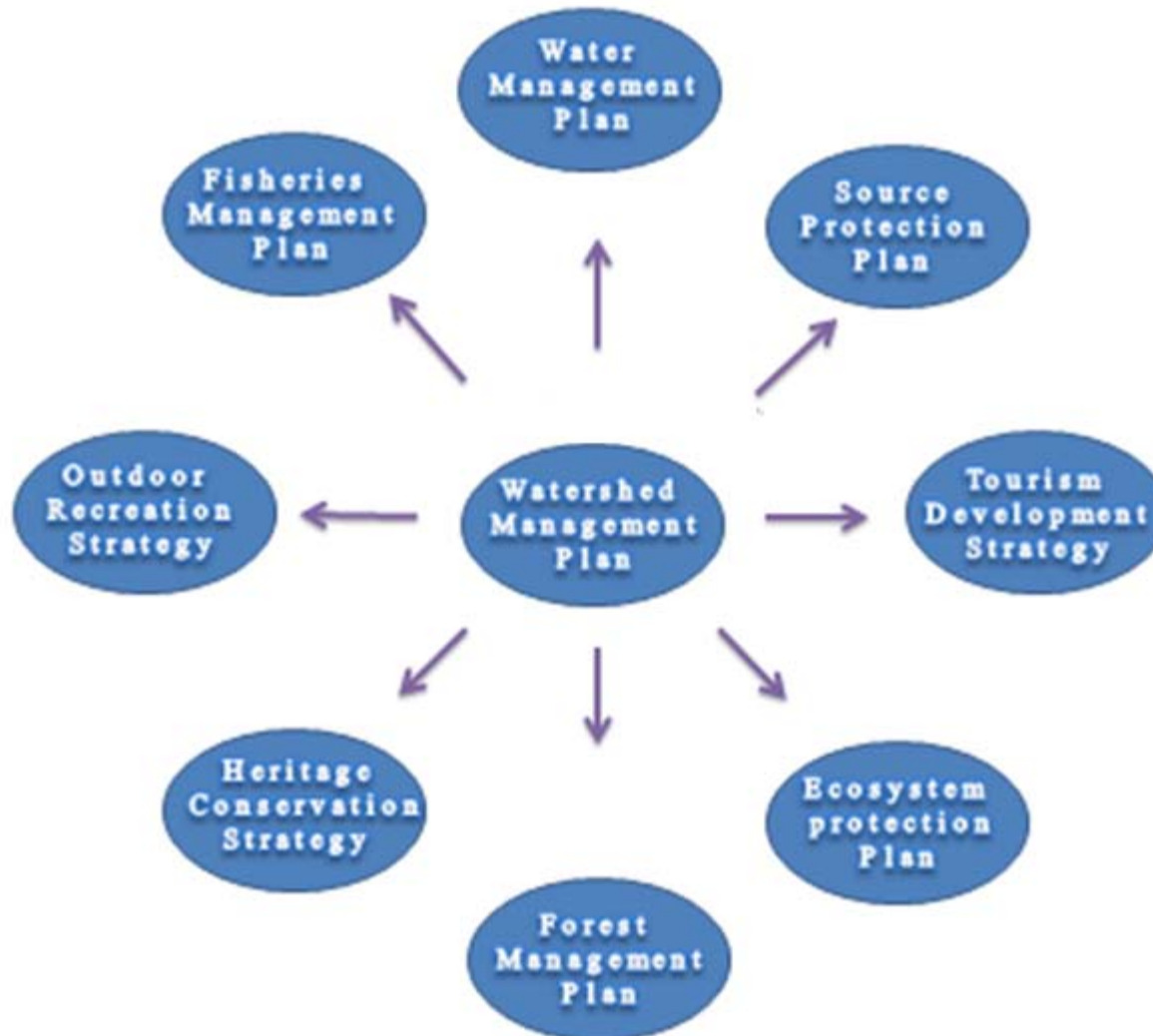


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■ Can We Create a River?

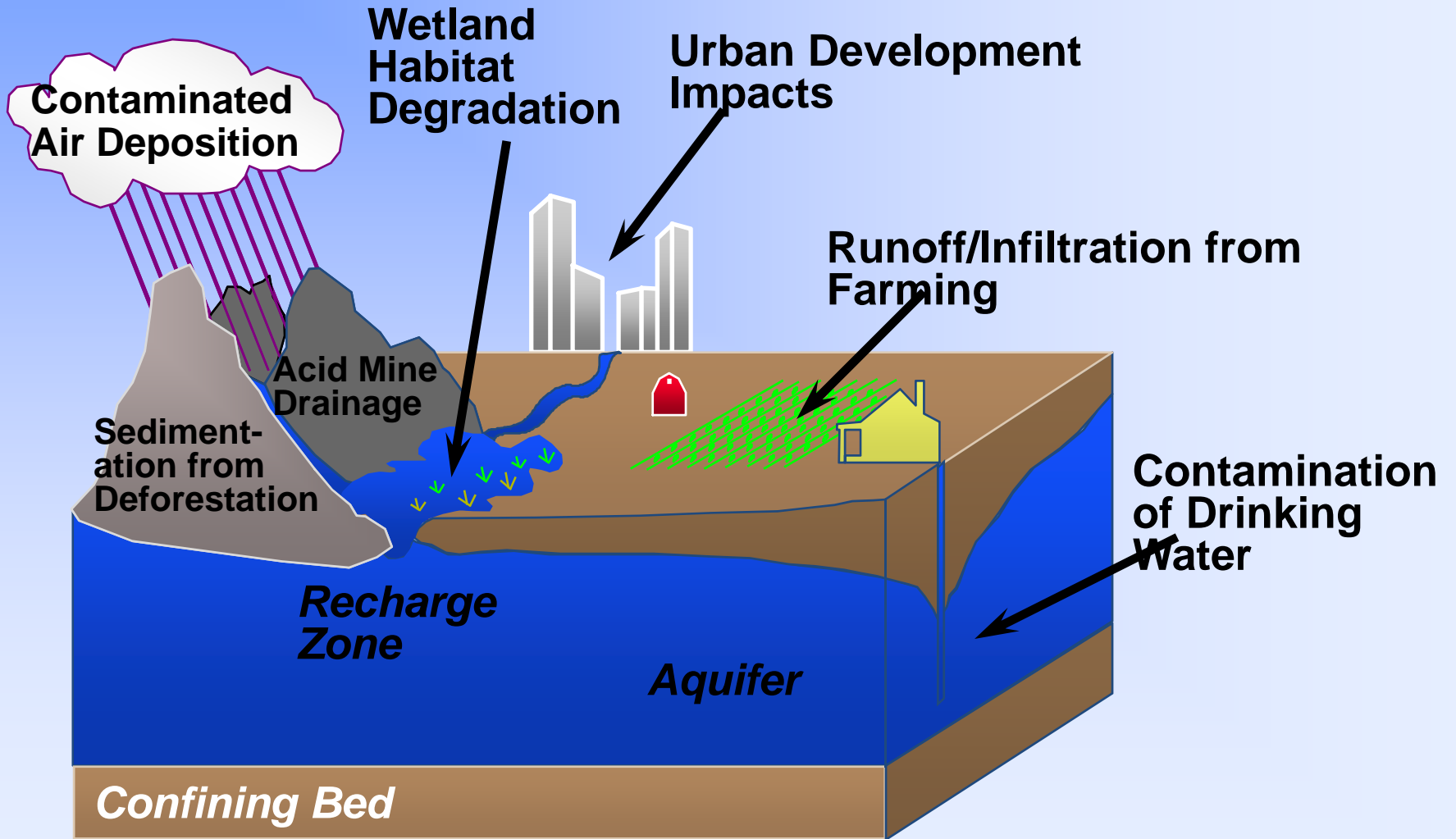
Simple answer is

Can we help towards establishing an Integral Ecosystem?



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- Water Management Plan –
 - Factors affecting Water Quality



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Factors affecting Water Quality - Human Factors



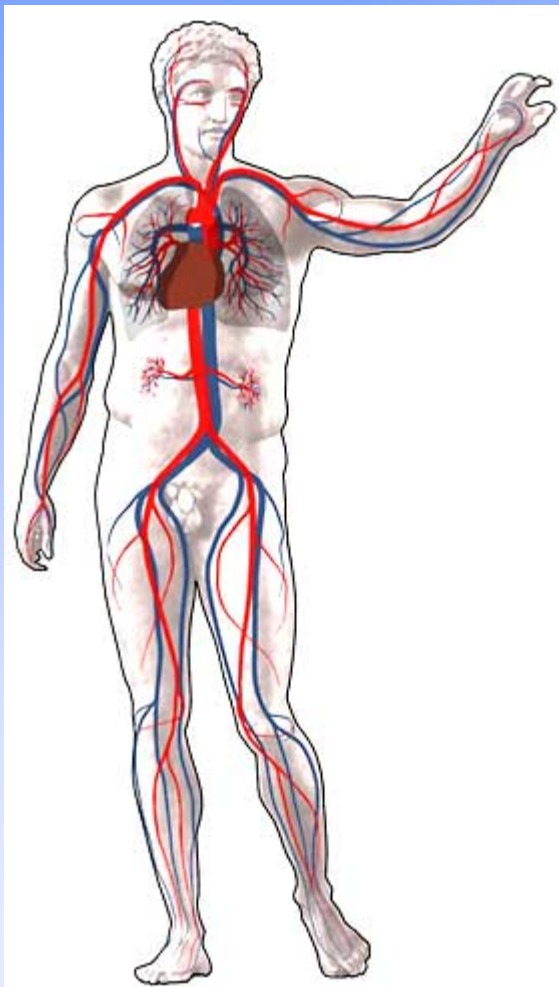
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- Watersheds – like Neurological Structure of Rivers

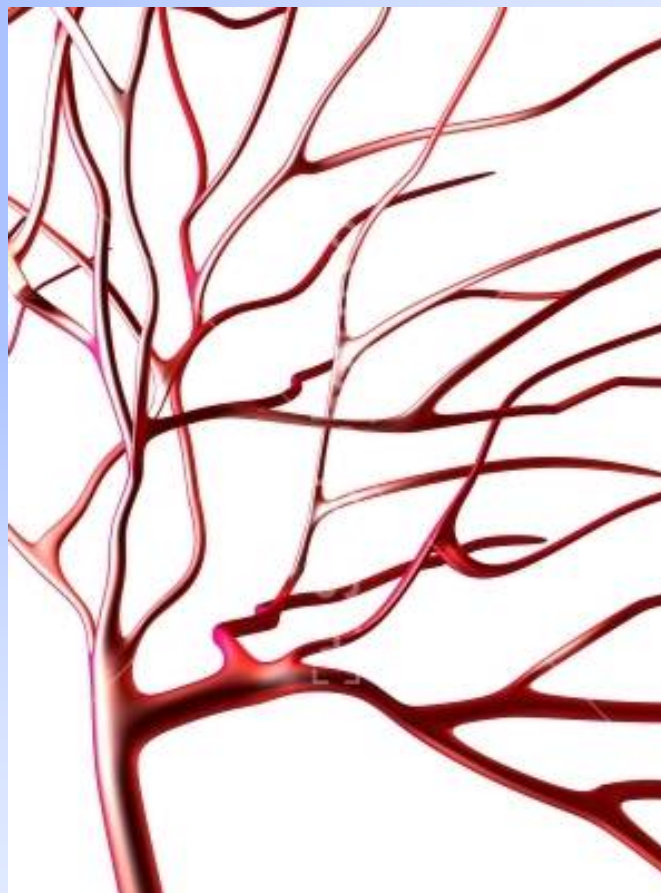


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Human Circulatory System

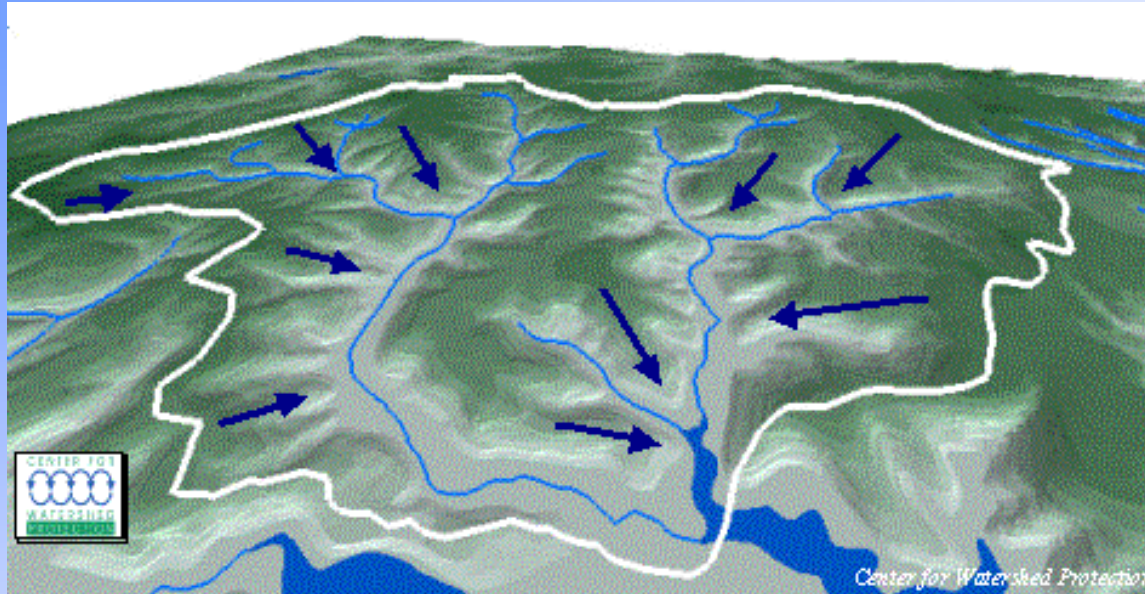


River of Life



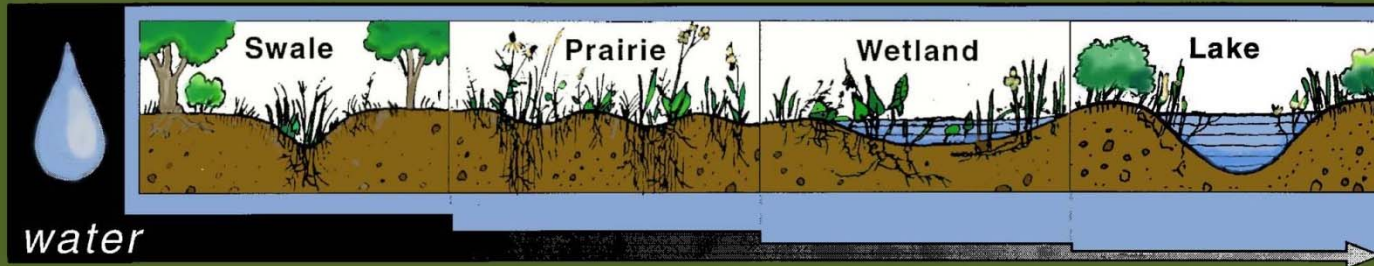
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- Watersheds – like Neurological Structure of Rivers



How to Keep the Runoff Clean?
Use natural Cleansing process

Stormwater Treatment Train



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Natural Aquatic Systems

- Existing lake, stream, and adjacent riparian and wetlands create “natural” attenuation potential
- Optimum situation for
 - Littoral wetland plantings
 - Streambank stabilization
 - Bioengineering
 - Stream buffers
 - Sediment forebays
 - Lake aeration
 - Nutrient and sediment management

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■ Types of Natural Treatment Systems



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Green Solutions



10,000 Rain Gardens KCMO



Wetlands Treatment Unit – Columbia, MO



Rebuilding Civilizations

- Most Important Classification of River



Peopie



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■ Major Rivers of the World – Facts and Figures

- Out of all of these Rivers we have looked at Amazon , Yangtze, Danube , Ganges , Mekong , Mississippi , Nile, Volga, and Yamuna River





Amazon



© www.danheller.com

Amazon

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■ Goal, Vision and Interactions

- *Clean and Vibrant Waters*
- *Connected Communities*
- *Sustainable Development*
- *Restoring and Protecting Rivers and Streams*

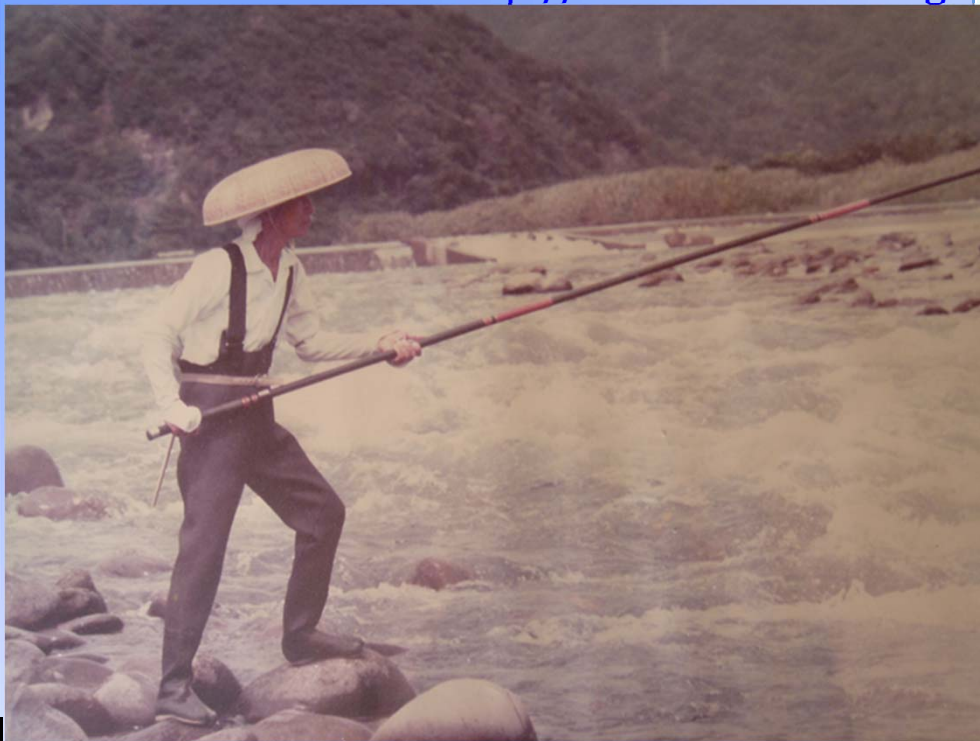


奈半利川(慎太郎前)アユ

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■ **Rivers of Japan** (check on the link at our website) - [Rivers of Japan - by Dr. Matthew Perry](http://rowfoundation.org)


<http://rowfoundation.org>



Mr. Sakamoto fishing the Nahari River in the 1980s at 90 yrs



Home About Us 2010 DCMC Television River 2002-07 Join as a Environment Mining Links to
Activities Dispensary Shows Stories Summits Member Treatment Partners

 **Rivers of the World FOUNDATION**
Mending Our Water Ways

Greetings from Rivers of the World
A Foundation Dedicated to Restoring/Protecting Rivers and Streams of the World

Welcome to the Rivers of the World (ROW) Foundation, Crofton, MD USA

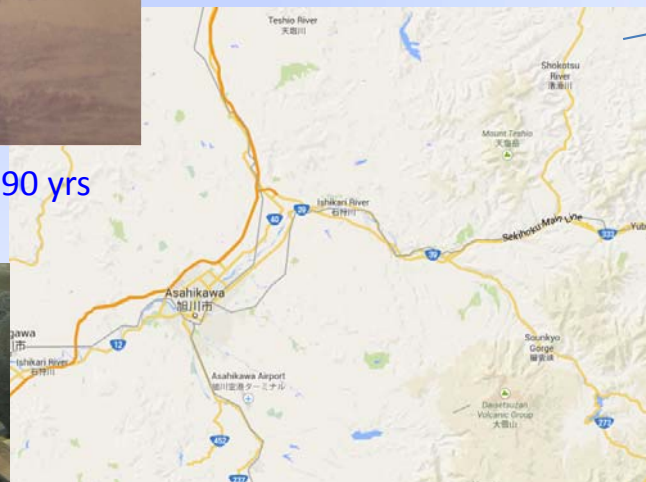
News and Updates

- Action Items from the 2014 Annual meeting **New!**
- [International River Summit 2014 - Philippines](#)
- [Annual Meeting Oct 25, 2014 AGENDA-Timezones](#)
- [Assistance to Typhoon Victims](#)
- [World Water Day-2014. More Pics/Reports](#)
- [World Water Day-2014- preliminary pictures](#)
- [Beaver Creek Watershed education by Dick Lahn](#)
- [News Report of a Visit to Lake in Mysore, India](#)
- [Rivers of Japan - by Dr. Matthew Perry](#)
- [Summary Report - ROW Annual Meeting, October 2013](#)
- [Supertyphoon Haiyan Disaster - Philippines](#)
- [Maps, Typhoon Path, and related stories - Click here for Details](#)
- [Water Advisory and Guidance during Disaster](#)

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[World Water Day-2013. Worldwide Activities with Detail Map Locations and Activity Reports](#)

[World Water Day-2013. Announcement of Worldwide Activities and](#)

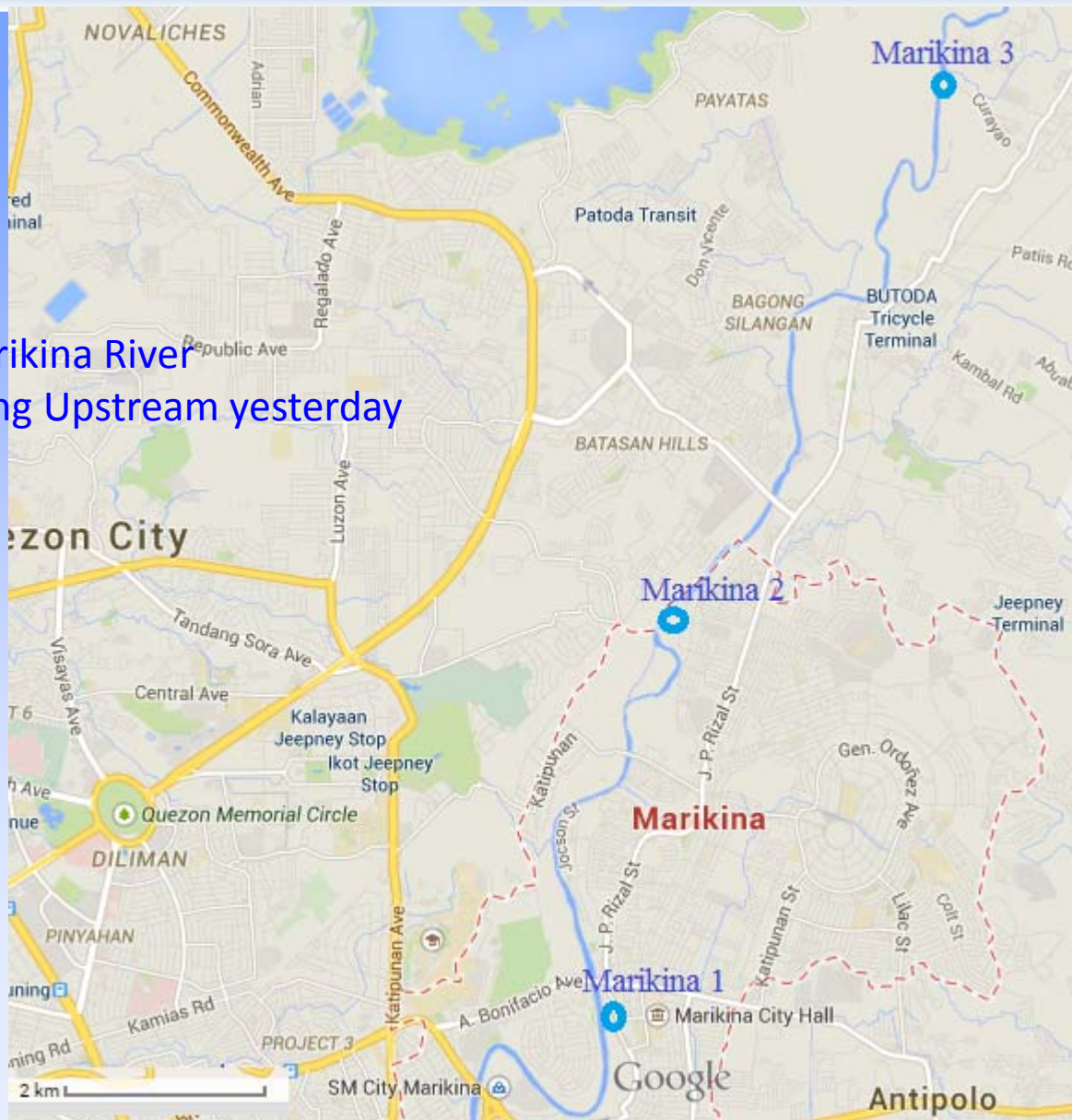


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Bottom Line... Let's Think International But Act Local

Looked at the Marikina River
from the City going Upstream yesterday
Nov 18, 2014



Nov 19, 2014

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From Marikina River Parks Development Office

OTHER RELEVANT DATA:

Marikina River is one of the main tributaries of the Pasig-Marikina-Laguna de Bay River Basin with a total drainage area of 534.8 square kilometers

It is the basin's longest main stream with a total length of 66.8km

The mean annual precipitation is 2,486.2 mm

The mean annual runoff is 106.4 cubic meter/second

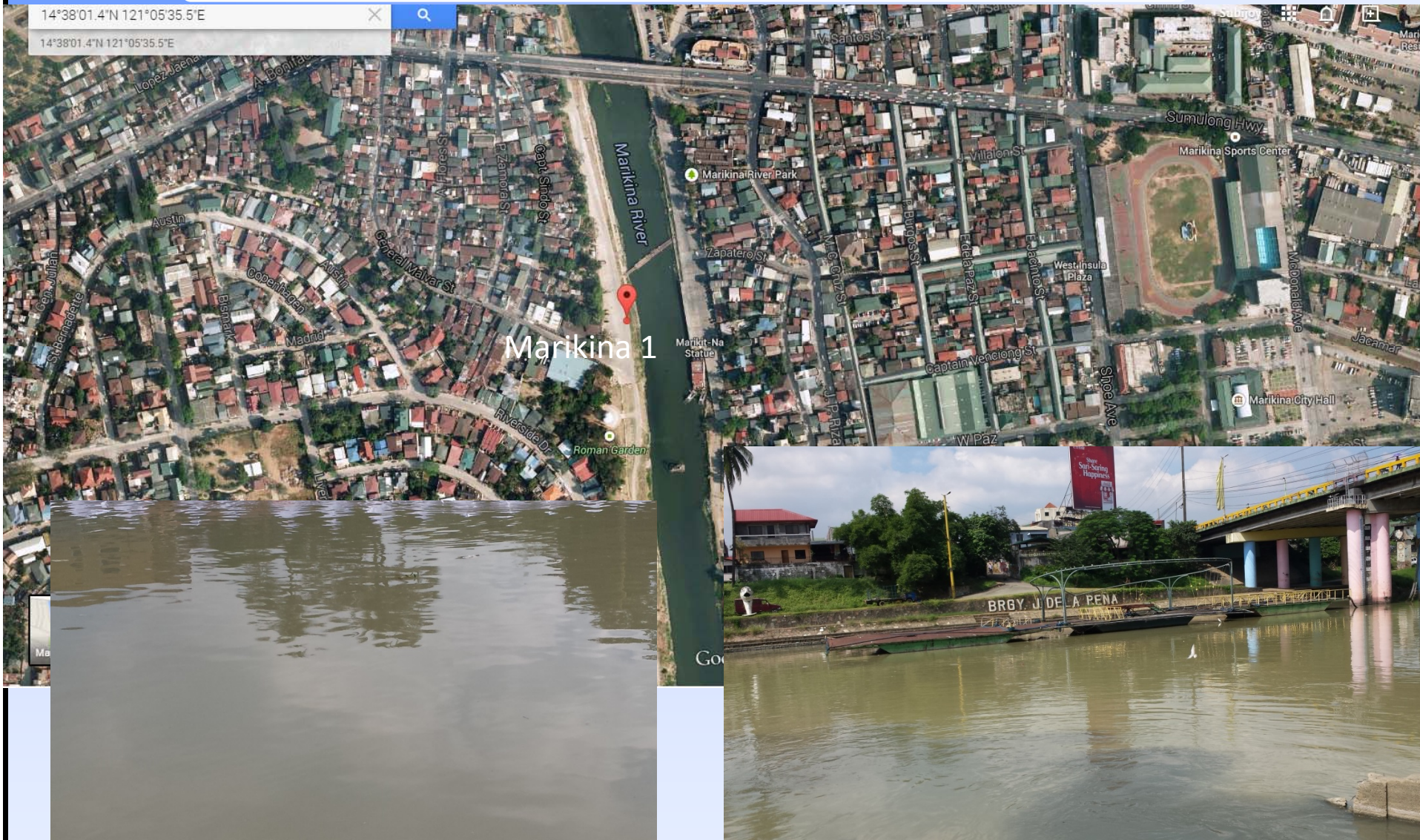
Average rainfall is 2,750 millimeter

Marikina River runs through Marikina Valley and a portion of the flow is controlled and diverted by Manggahan Floodway towards Laguna de bay. The remaining water is drained to Manila Bay by the Napindan Channel.

Mean TDS – 173 mg/l

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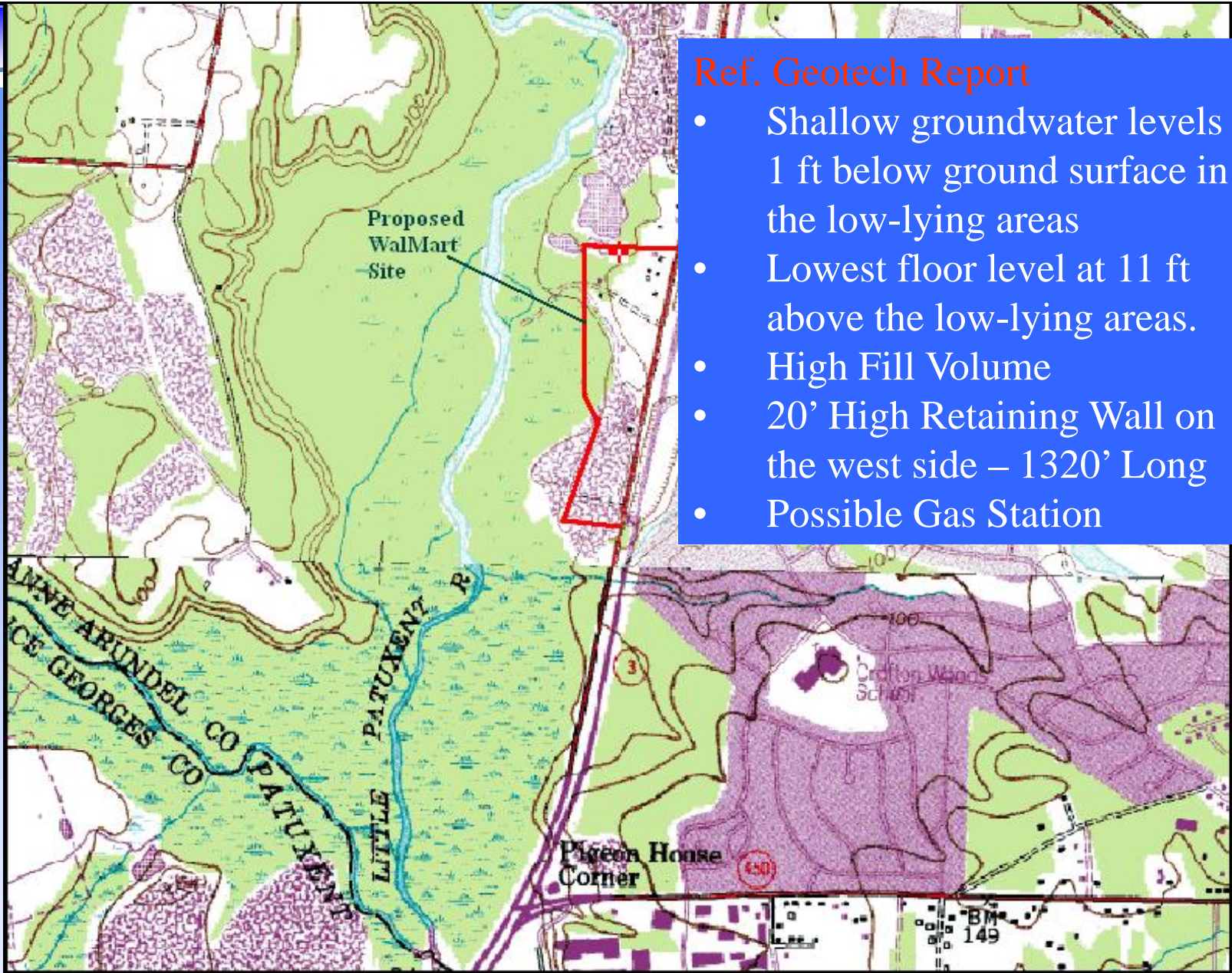
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Case Study - Impacts of Proposed Big-Box on the Floodplain

Facts

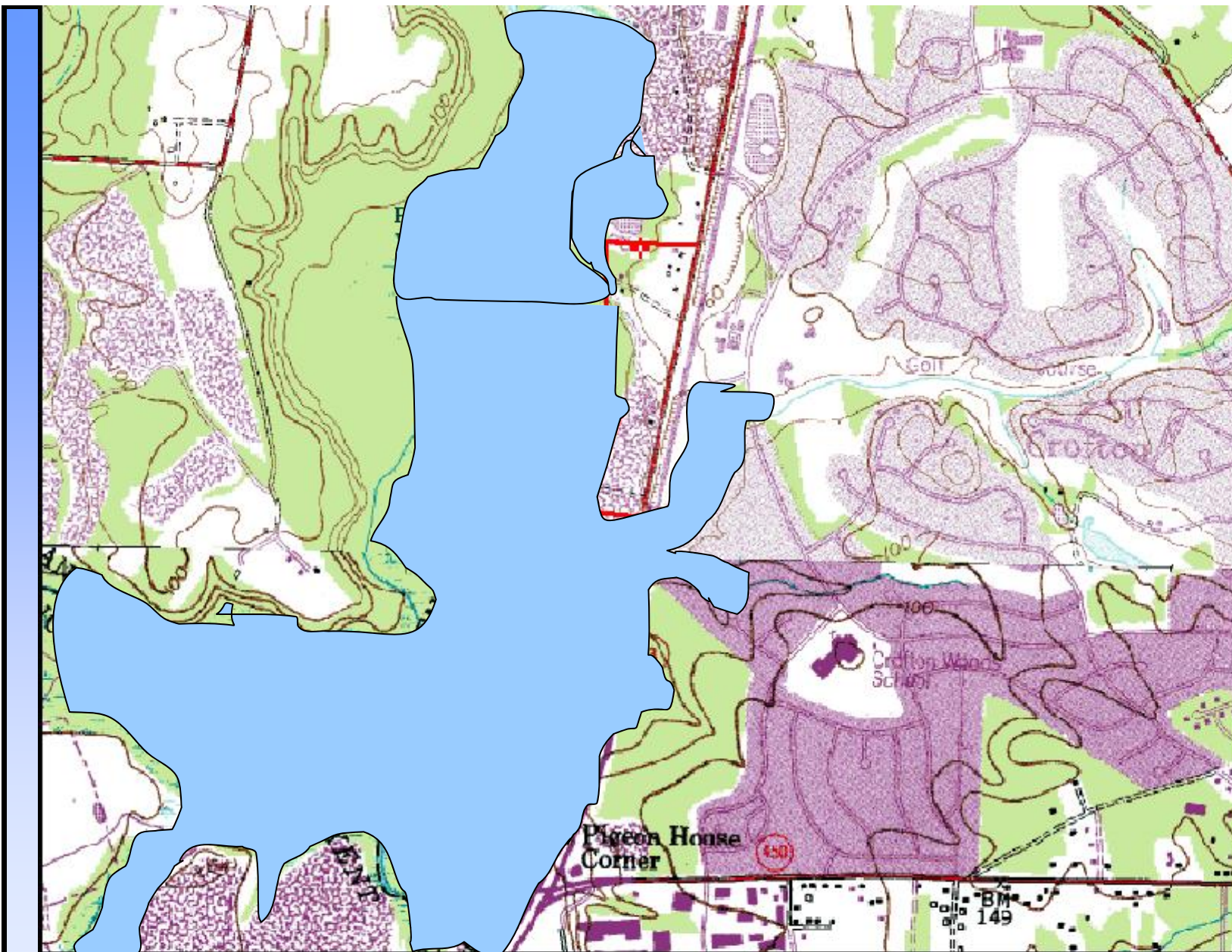
- ✧ Crofton Resident for 11 years
- ✧ Have Grave Concerns about the Proposed Development
- ✧ Devoted Considerable time looking at the site Development Plans
- ✧ The Proposed Development is Expected to have a serious Impact on
 - ✧ The Floodplain and
 - ✧ The Sensitive Ecosystem
- ✧ Without a full scale **Environmental Impact Assessment** of the proposed development it would be really difficult and imprudent to comment on the actual measurable amount of damage and impact .

Impacts on Floodplain



Ref. Geotech Report

- Shallow groundwater levels at 1 ft below ground surface in the low-lying areas
- Lowest floor level at 11 ft above the low-lying areas.
- High Fill Volume
- 20' High Retaining Wall on the west side – 1320' Long
- Possible Gas Station



0 0.3 0.6 0.9 1.2 1.5 km

0 0.2 0.4 0.6 0.8 1 mi

39° 00' 28"N, 76° 42' 02"W (NAD83/WGS84)



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Now the River Questions

Can you use a River just to meet your own needs?

Did your River ever roar and become scary?

Can you help to meet the watershed needs to cool down your River?

How many glasses of water your River carries in a day? Say 1,000

If you mix 1 glass of gasoline/petrol in there that will be 1000 (ppm) – it Could be Cancerous if drank

Can you hear/feel the cry or smile of your River? YES

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■ Want to Start helping your own Rivers and Streams?



- Visit www.rowfoundation.org
- *Guide the Flow path to your direction....*

Wishing a Great Success

*To the Organizers and All of the Participants
at this 2nd International River Summit
in
Marikina City, Philippines*

Questions/Comments:

Please contact -

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