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August 22. 2014

New Jersey Highlands Council
100 North Road (513)
Chester, New Jersey 07930

Re: Highlands Regional Master Plan Re-Examination

Dear Council Members:

I understand that you will, or have been, receiving public comment on the ongoing re-examination of the 2008 Highlands Regional Master Plan. Consequently I am forwarding the attached 25 page Comments and Report for your perusal, in hopes that it is timely enough for consideration by your consultant(s).

Should you or your consultant(s) have any questions please feel free to contact me at any time.

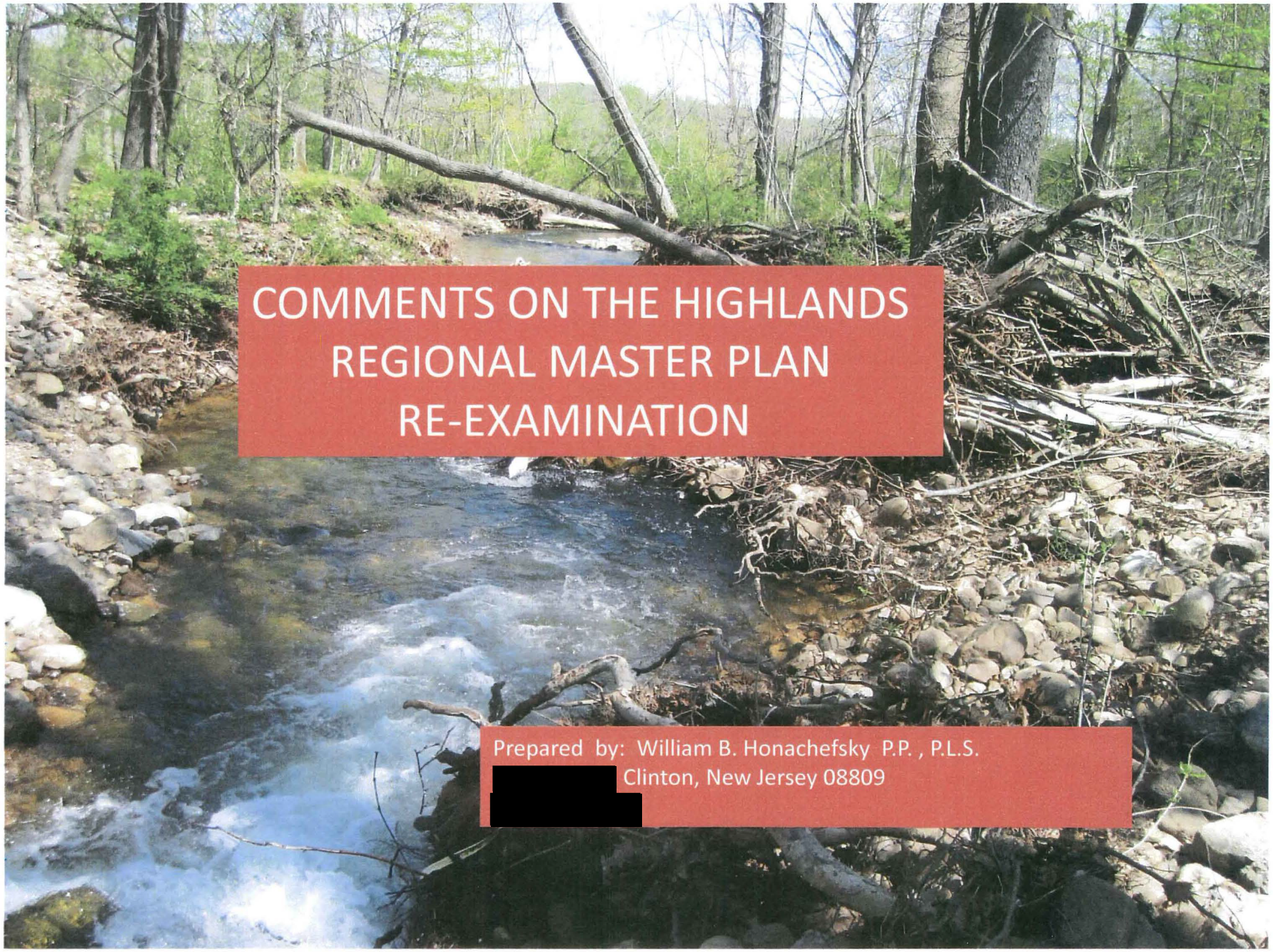
Thank you for your consideration.

Sincerely yours,

William Honachefsky

William Honachefsky

W/ Enclosures



COMMENTS ON THE HIGHLANDS REGIONAL MASTER PLAN RE-EXAMINATION

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LOOKING FOR THE HIGHLAND'S INDICATORS IN ALL THE RIGHT PLACES

The "reconstituted" Highlands Council, has issued a contract to the Regional Plan Association (RPA) to essentially see what the 2004 Highlands Act, and particularly the 2008 Highlands Regional Master Plan (HRMP), may have wrought in the Highlands over the last 6 to 10 years, including the primary objective to; "…..**develop indicators** and milestones…", for the evaluation of regional conditions in the Highlands, and to identify potential new or emerging issues, and to identify potential Regional Master Plan (HRMP) priorities. Where they look to acquire those **indicators** and milestones however, will dictate whether the RMP will remain true to its core objective of protecting some of the most critical waters of the state. This core objective may be at risk at the outset, by an obvious lukewarm support of the RMP and even the RMP's progenitor, the 2004 Highlands Act, by some of the newest Council appointees. A mindset abetted by a small minority of RMP critics who have forged a frenzied barrage of vacuous sound byte generalizations proclaiming widespread unconstitutional property takings. ("See Landowner Equity and Protecting the Commons") www.planetizen.com/node/88

In any event, there can be no better place to seek indicators and measure what has been forged upon, and ultimately shed from the Highlands landscape then within the ***ultimate indicators*** of the Highlands, **its waterways**, (See Figures to follow) albeit not so much by the Highlands RMP in the relatively short, last 6 years, but more so by the multiple Municipal Master Plans and zoning ordinances in place not only for the past 6 years, but in the many decades prior. All of which, by the way, the Highlands RMP was designed to collectively muster, support, and assist.

These local MMPs to become the initial building blocks and the Highlands HRMP the mortar. It is in these receiving waterways that the final product of all of this land use planning, and resculpting of the Highlands landscape will be truly revealed, evaluated and measured, and the results, I can assure you, are both unsettling and sobering.

There is considerable naiveté as to how land use planning and environmental protection really work in New Jersey, as well as nationally. We may think that State and Federal governments have overall control over protection of the environment. However, long before the respective State and Federal environmental protection agencies sit down to review projects and issue regulatory permits, municipal land planners will have been out there, well ahead of them, prescribing, mostly through zoning ordinances, where residential subdivisions should be placed and at what densities. They will also have determined where and how factories, commercial and office buildings are to be located, how much impervious parking lot and roadway asphalt is to be allowed, and where stormwater and sewage collection systems will be placed and discharged. They will also have determined what water supplies are to be used for all this new development, and where the new local roadways to accommodate these new landscape changes are to be placed. By the time Federal and State regulators arrive on scene to fulfill their obligations to protect the environment, the character of the resulting landscape will already have been determined. The problem with this schema is that this local land use planning occurs mostly on an independent, uncoordinated, fragmented, site by site basis, producing unintentional landscapes collectively destructive, to the structural configuration of stream channels and the character of the water that flows within them, thereby

robbing them of their ability to treat, calm, hold, and especially control floodwaters. If you do not believe this, ask those living along the Raritan, Passaic and Pequannock rivers. Too add further insult to injury, on their journey through this maze of incongruent, site by site designs we repeatedly inoculate these same waterways with a collection of pollutants, some so harmful, that they threaten the lives of both man and beast.

As someone, who for the last 38 years has collected thousands of water, storm water, soil, sewage, sediment, fish and other biological samples throughout the state, including at some of the state's most toxic and contaminated sites, and walked hundreds of miles of streams from Sussex to Cape May County, I do know this, Regional planning in the Highlands is an absolute must if we are to avoid adding to the $200 billion in environmental damages left to us by our predecessors.

So we invite the Highlands Council and their newest consultant to join us as we explore the State's landscape looking for the best and ultimate indicators of what our land use planning efforts have wrought thus far, absent a regional Master Plan.

OUR WATERWAYS ARE CRYING OUT FOR HELP

Figure 1 – This Highlands stream is already in serious trouble, exhibiting severe channel erosion, decreasing depth, widening, and tree collapse. Mulhockaway Creek - Circa 2014.

Figure 2 - This headwall once stood at the foot of the receding stream bank shown in background - Elizabeth River.

Figure 3 - Stream bank erosion and last resort erosion control - Mahwah Brook.

Figure 4 – Continuing development and increasing storm water runoff will[i] require more expensive attempts at mitigation – Clove Brook.

Figure 5 - Eventually even more drastic structural stream bank replacement becomes necessary - Beaver Dam Brook.

Figure 6 - Even primarily agricultural land is not immune to ever increasing quantities of storm water runoff - Neshanic River.

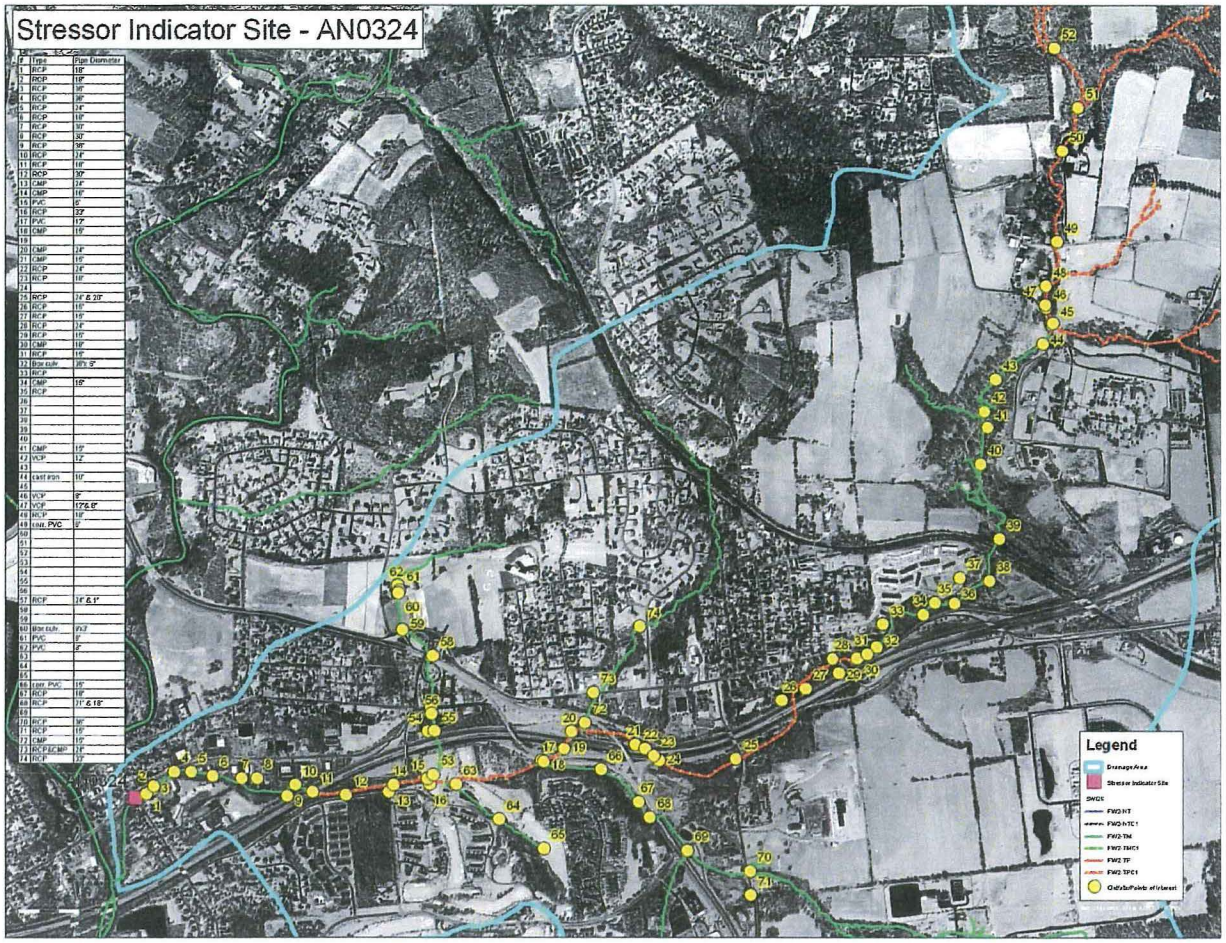

Figure 7 – This Highlands Category 1 tributary to the South Branch of the Raritan River has over 50 storm water outfall pipes discharging into it, over a distance of less than 2.5 miles – Beaver Brook.

TRYING TO STEM THE FLOW

Figure 8 - The installation of storm water retention and detention basins was supposed to ameliorate the peak flows of storm water runoff from each development site. No one has looked to see if such unsynchronized discharges are additive, thereby producing the damaged stream corridors seen in Figures 1 through 7.

Figure 9 - Typical dry extended detention basin with concrete low flow channel - a frequently used Best Management Practice.

Figure 10


Channel width
upstream of outfall
pipe shown in
previous Figure 10

Figure 11

Figure 12 – Is it any wonder our stream channels are being washed away.

STREAM CHANNEL DESTRUCTION IS NOT THE ONLY INDICATOR TO BE HEEDED

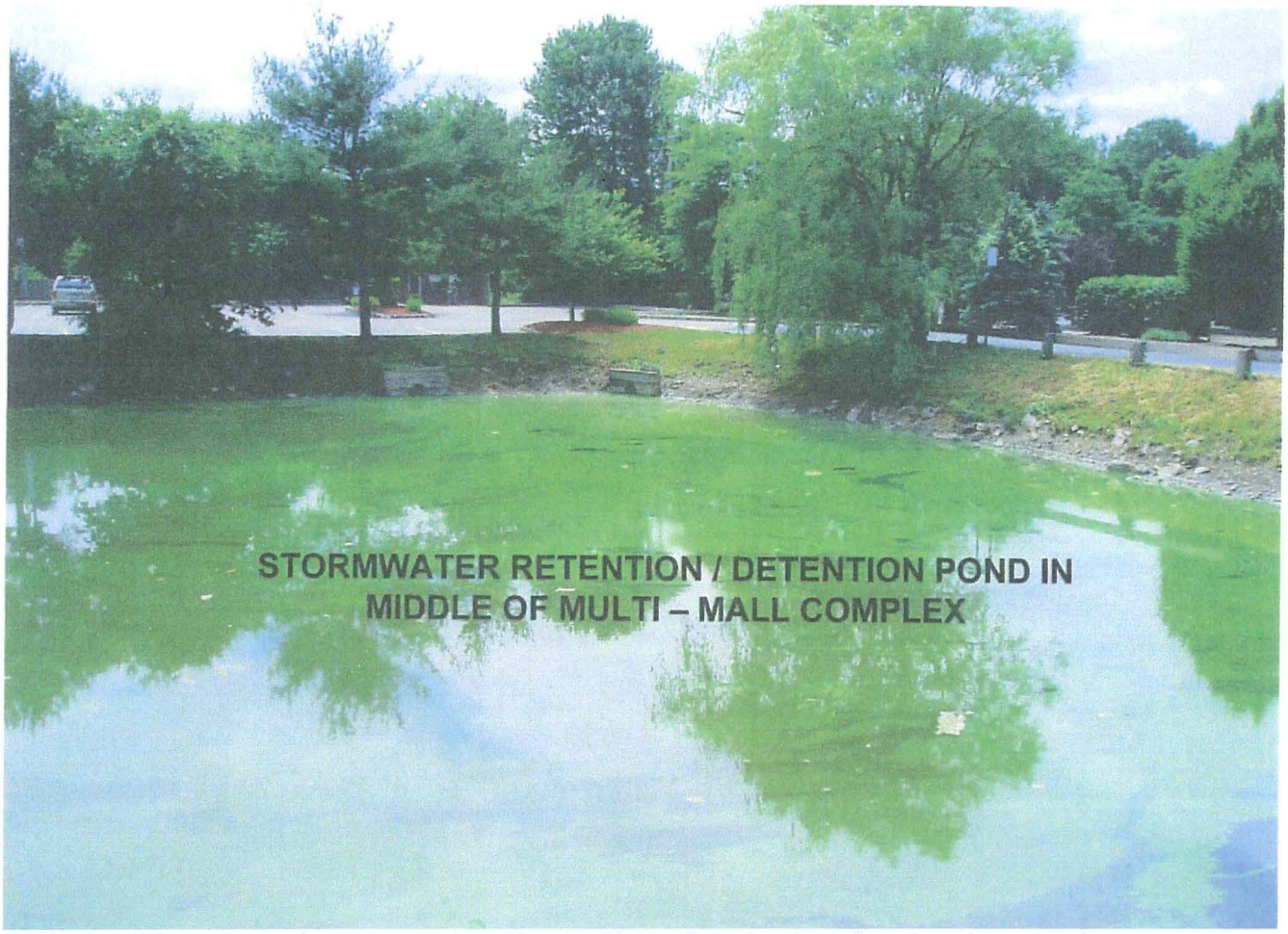

Figure 13 – Nutrients and other dissolved chemicals flushed from all the surrounding asphalt pavement end up here, producing oxygen robbing algal blooms soon to exit to nearby waterways.

Figure 14 – Careless salt storage flows off the pavement and directly into the nearest waterway. Who's watching after approved site plans are put away and archived.

Figure 15 – See Figure 16 for sediment sampling results

CHEMICAL SAMPLING RESULTS AT THE OUTFALL OF MALL

- SEDIMENT ACUTELY TOXIC
- SEDIMENT PETROLEUM HYROCARBONS = 1,430 MG/KG
- FOUND ANTHRACENE, PYRENE, CHRYSENE AMONG OTHER PAHs

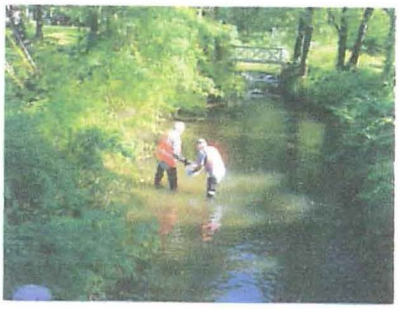

Figure 16 - The gift that keeps on giving.

LANDOWNERS STRUGGLE TO SAVE THEIR LAND

Figure 17 - The continuing onslaught of out of control Channel erosion forces homeowners to take drastic protective measures-See Figure 18.

Figure 18 – Sometimes exasperated homeowners have to take drastic measures to try to stop the unrelenting channel erosion. Indivdual landowners however, cannot do it alone, nor can individual municipalities operating independently.

DIFFICULT CHOICES LIE AHEAD, BUT THEY MUST BE MADE

Lyle (1994) correctly opined, "*The problem lies partly in our 20th century habit of thinking of development as a matter of economics or what Daly and Cobb(1989) call the "focus on mathematics in place of empirical attention to physical reality.*" That physical reality is upon us, and we simply cannot afford to carry the status quo of current local land use

patterns, into the Highlands. The same land use patterns that ripped apart and fouled the state's waterways, that dropped groundwater levels and depleted aquifers, and left us with a trillion dollar cleanup bill for damaged and polluted waterways, stream sediments, aquifers and soils.

SOME GOOD, INITIAL INDICATORS WE HOPE THE COUNCIL'S CONSULTANT WILL CONSIDER EXAMINING

- POUNDS OF BOD5 LOADING TO EACH SURFACE WATERWAY FROM NJPDES PERMITTED DISCHARGERS
- NUMBER OF STORMWATER DISCHARGE PIPES ALONG EACH STREAM REACH
- HISTORICAL MAPPING, BY PERCENT, OF IMPERVIOUS COVER AND LAND USE CHANGES OVER TIME IN EACH WATERSHED
- NJDEP'S STRESSOR IDENTIFICATION PROJECT, DESIGNED TO IDENTIFY PRINCIPAL STRESSORS TO THE STATE'S WATERWAYS

CLOSING COMMENTS

I want to assure the Highlands Council that even big industry gets the importance of safeguarding our precious waters, and for that fact, our whole ecological infrastructure. Here are a few of their observations:

Willem Buiter, Chief Economist at Citigroup

"Water as an asset class will, in my view, become eventually, the single, most important, physical commodity based asset class, dwarfing oil, copper, agricultural commodities, and precious metals."

Ray Anderson, CEO, Interface Corp

".. I'm part of an endemic process that is going on at a frightening still accelerating rate, worldwide to rob our children, their children, theirs, and theirs of their futures. There is not an industrial company on Earth, and I feel pretty safe in saying, not a company or institution or firm of any kind, not even an architectural firm or an interior design practice, that is sustainable in the sense of meeting its needs without some measure depriving future generations of the means of meeting their needs. When Earth runs out of exhaustible resources, when ecosystems collapse, our descendants will be left holding the bag. And some day people like me may be put in jail."

To the Highlands Council members I say, it cannot be all about economics. Without a sufficient quantity and quality of water, there can be no industry, no business, no farming, and no quality of life, despite how much we irrigate the land with dollars.

[i] Figures 2 thru 7 courtesy of NJDEP Bureau of Freshwater and Biological Monitoring, J. Abatemarco. Figures 8 thru 16 from public presentation by NJDEP staff, 2012.