CYPRESS MARSH RESTORATION OF BAYOU BIENVENUE CENTRAL WETLAND UNIT

The Sewerage and Water Board of New Orleans and St. Bernard Parish jointly proposed that a regional wetland restoration project be funded to restore approximately 10,000 acres of critical cypress wetlands using wetland assimilation of wastewater effluent.

THIS IS AN EXPERIMENT

Whether or not new methods of treatment will eliminate the risks posed by certain chemicals and metals is *unknown*.

PROJECTED OUTCOMES

- The Effluent Will:
  - act to buffer saltwater intrusion
  - increase accretion rates to balance a high relative water level rise due mainly to subsidence
  - improve plant productivity and habitat quality
  - improve surface water quality.

Bayou Bienvepoo

Effluent is treated wastewater that is supposed to be safe but non-potable (not for drinking). The effluent that they propose to put into Bayou Bienvenue, according to the Central Wetlands Unit Assimilation project, will include what is flushed down our toilets. In this project, biosolids (mostly dry sludge) will also be introduced where fill is needed.

DOES IT WORK?

This type of assimilation works well in "**constructed** (man-made)**wetlands**", because the wetlands are constructed for this purpose:

- Continuous monitoring and adjusting of the amounts of freshwater, salt and nutrients that are flowing through the constructed wetlands at any time

- Species of plants and animals are carefully chosen so that only those that will thrive under these conditions are included

Wetlands assimilation will also usually succeed in a **swamp** which is not dependent on wet/dry cycles

WILL IT WORK IN A NATURAL MARSH?

Assimiliation Will Not Work In A Natural Marsh:

- The increase in water level caused by the introduction of the effluent in liquid and solid form disrupts the wet/dry cycle on which marshes depend.
- Without a dry cycle, the root systems of native vegetation begin to rot.
- This decay adds nitrogen to the marsh in addition to the nitrogen and phosphorous from the effluent/biosolids.
- Marsh then suffers from nitrogen and other overloads which are toxic to the environment.

WHAT ABOUT THE OTHER BENEFITS?

- Proponents say that this project is necessary to the healing of the hypoxy (dead) zone in the Gulf of Mexico. According to Chris Schultz, a scientist at Southeastern Louisiana University who has studied the effects of assimilation extensively, the effect that the Bayou Bienvenue Assimilation project will have on the hypoxy zone is ***statistically nonexistent***.

- Additionally, instead of the effluent functioning as freshwater which pushes the saltwater out to provide necessary balance, the effluent travels throughout the bayou to adjacent waterbodies, contaminating larger areas away from the discharge.

- Death of vegetation/animals; and the growth of algae are unavoidable due to nitrogen overload.

- In Pontchatoula/Hammond, it has caused the death of the marsh where the discharge of effluent has been allowed to proceed.

MISCONCEPTIONS

- Increasingly, the CWU project has been changing its language to refer to this section of wetlands as "swamp". This unit, however, is made up of very little swamp; and, the vast majority of this area is marsh.

- The assimilation that has been undertaken thus far is held-up as an example of how effective this project will be. However, assimilation has only occurred in small areas of swamp—not in the marsh.

- Economic benefits are also touted; however, it appears that these benefits come from comparisons based upon the relaxing of DEQ standards for municipalities; as well as, the cost of treatment pre- and post-discharge which is akin to comparing apples and oranges. If you would like an economic analysis of the project, we would be happy to provide one.

WHY PURSUE CWU ASSIMILATION?

- Proponents base the need for assimilation on two factors:
  - **Climate Change**—warns of the need for sustainable designs to combat sea level rise and global warming. Over 30,000 scientists (many of whom worked on the projects meant to establish these false claims) now state that Climate Change is false science.
  - **Storm Surge Protection**—unless plans begin with building the Barrier Islands and coastal bank stabilization, there will be no real storm surge protection provided.

ACTUAL REASONS FOR THIS PROJECT

"Smells like money." (Sarah Mack, NOS&WB and Tierra Resources)

- Helps to launch Cap n Trade in LA:
  - carbon sequestration
  - carbon credit banking
  - wetlands banking
  - water quality credits
- Algae creation for biofuels
- "In order to maintain a significant settlement at New Orleans, space for water must be allotted and an operational water management infrastructure developed." (David Waggonner)
- "No community has more to lose or more to gain than New Orleans." (Transition New Orleans Task Force of which David Waggonner is listed as a member)