

A brief speech by Derek Schubert of SAVE International, at the National Assembly (Seoul, Republic of Korea) on June 23, 2010, following Prof. Randy Hester's presentation on river restoration in the USA:

Engineers have a responsibility to use their knowledge for the good of the public. Like a doctor or a lawyer, an engineer studies for many years and works hard in order to serve the public honorably; a civil engineer or an environmental engineer is also obliged to do no harm to the earth. This code would forbid me, for example, from working on a project if it were beyond my knowledge or experience.

On large projects such as river restoration, engineers never have all the answers. We work with scientists, ecologists, environmental planners, landscape architects, and other people whose knowledge complements our own.

Nature is unimaginably complex and is not always pretty to human eyes, but it is never wasteful. It is elegant. Every part has its place. A willow thicket and a muddy tidal flat present a beauty all their own. Only a simple or ignorant mind would believe that dredging a river or building a dam will affect the flow of water alone, or that making a natural place "pretty" will necessarily make it better.

Engineers used to believe that they needed make rivers more efficient. They straightened rivers, lined them with concrete, buried them in pipes, built dams. This is an attitude of the past, best left to the past.

Engineers today know that a river is much more than just flowing water. They gather information and work with a team to ensure that the engineering will not harm the river's ecosystems. Even since the 1990s, when I was studying civil and environmental engineering, the education of engineers in the United States has become more holistic and inclusive.

As you heard Professor Hester say, the United States and Germany and other nations are trying to heal the damage of misguided projects from the past. River restoration involves removing concrete and adding wetlands; it involved preserving what already works. These recent magazines [holding up a Sierra Club and two Nature Conservancy magazines] present success-stories of rivers where dams have been removed in Montana and Maine, and levees have been deliberately breached in Louisiana.

Just as a doctor does not operate on a healthy patient, an engineer does not have to change a healthy river.

From what I have read and seen of the 4-Rivers Project, engineering is being used simplistically or inappropriately. There are many ways to reduce floods, for example, besides dredging, armoring a riverbank with concrete, or building a dam.

Detailed scientific information about the 4-Rivers Project is widely available and overwhelmingly

discredits the project. According to the "Preliminary Report on the Anticipated Impacts of the Four Rivers Project", recently released by the NGO Birds Korea, this project will push more than 50 species of birds closer to extinction. The project will destroy healthy wetlands, destroy estuaries, destroy shallow-river habitat. To quote the Executive Summary of the report: "The Four Rivers Project will hinder the nation's [South Korea's] efforts to achieve genuinely sustainable development as set out by the United Nations and the Millennium Development Goals."

We can see the rivers being disrupted, habitat being destroyed. Even if the proponents and engineers did not intend to cause harm, they are causing harm anyway.

Engineering is supposed to be a process of solving problems, not creating new ones.

Because the 4-Rivers Project ignores scientists, ecologists, planners, and other people with insight, it violates current standards of engineering. Its simplistic attitude toward rivers is decades out of date. It does a terrible disservice to the rivers, wildlife, and people of Korea.

I urge you to cut all funding from this project immediately, and prevent any more needless operations on healthy rivers.

Thank you.