

M U S H R O O M S

...a cure for the (not so) common wetland

REALITY CHECK

Fifty years and one meter sea-level rise will destroy most of our existing wetlands. Nature will inevitably rebuild itself, but the costs may eventually turn out to be us. It is time to pick up our collective feet. Fungi can help us erase part of the footprint we have left behind.



Mushroom mycelium is introduced to soil contaminated with diesel and petroleum waste. The mycelium breaks down the hydro-carbon bonds and converts them into carbohydrates (fungal sugars).



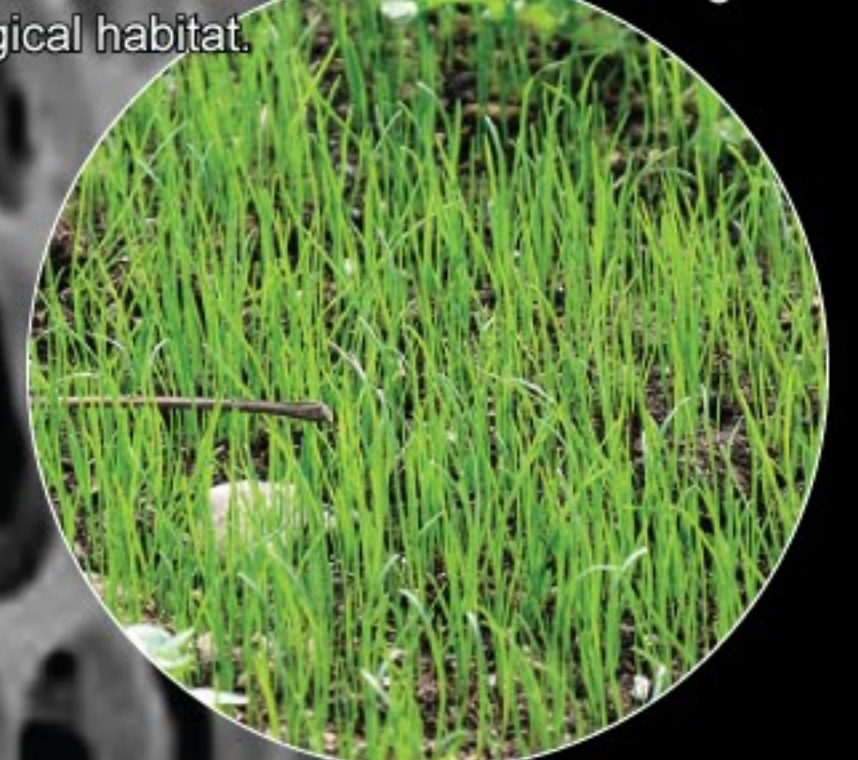
The fungal sugars are remanufactured into mushroom mass. The hydro-carbons are fully absorbed, resulting in very large mushrooms.



The mushrooms then decompose and sporulate, attracting insects. The insects lay eggs, hatching into larvae.



Birds descend to feed on the larvae, transporting plant seeds in their stomachs. These seeds are deposited, and a once heavily contaminated mound of dirt transforms into a nutrient-rich soil suitable for sustaining a biological habitat.



San Francisco International will succumb to rising tides. The land is highly contaminated by fossil fuel emissions and petroleum waste. Mushrooms can (re)constitute the soil and plant the seeds for a thriving new ecosystem.



STOP

We are defined by our ability to adapt, react. Nature stimulates and we respond. The conversation is not new, but we have not listened for too long.

LOOK

Working backwards tells us to flex our unilateral muscle, re-awaken the industrial complex and set it loose in a new direction. Plagued by a linear train of thought, we end up walking blind with no guarantee of a plausible, sustainable solution. The uncertainty is disconcerting.

LISTEN

Striding forward involves accepting the truth that the tides will rise and we must simply get out of the way. And it is on us to give back to Nature what we have so naively exploited. It is high time we started contributing to the conversation again.

N E X T S T E P S

Stop Building!

Immediate moratorium that prohibits developing on land proven to succumb to rising sea levels in the next 50 years:

- **It does not make (eco)nomie sense!** Wetlands account for social benefits estimated at \$300,000 / acre
- Money squandered trying to maintain developments that never should exist in the first place
- Lay the ground work to (re)activate the land. Introduce mycelium to contaminated soils. Nature will take care of the rest

Water is the new LAND...

Living on / in / under water is inevitable. The first step is to seriously consider replacing SFO with a Floating Airport:

- We can do it (Mega-Float, Yokosuka, Japan)
- Never build another airport (Add runways as demand increases)
- Nodal access around the bay improves travel time and convenience
- **Remember the conversation!** The new airport will purify water, produce energy, and provide habitat for marine life

