

BAY AREA

What to expect if bay waters rise by a meter

S.F., Oakland airports, Giants ballpark, roads would be flooded

- Jane Kay, Chronicle Environment Writer

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If the oceans rise as expected over the next century and nothing is done about it, bay water would slowly flood San Francisco and Oakland airports, cover highways and inundate Treasure Island, the Giants ballpark and parts of Alameda and Silicon Valley.

Even now, water managers are fighting global warming. The bay at Fort Point has risen 8 inches over the past century and could rise another 3 feet by the end of this century, according to the last assessment of international climate scientists.

Already, at some high tides, Tom Franza, the San Francisco Public Utilities Commission's assistant general manager, watches as salt water flows over cement structures and into the city's sewage treatment system. The salt can kill the microbes that eat up biological waste.

And Walter Bishop, the Contra Costa Water District's general manager, is struggling to build reservoirs and is considering desalination to prepare for rising bay water that could flood the Sacramento-San Joaquin River Delta and ruin his water supply. More than two-thirds of Californians also rely on the delta for their drinking water.

Franza and Bishop were among hundreds of water managers from the Bay Area, Los Angeles, San Diego, Portland, Seattle and as far away as the United Kingdom who gathered in San Francisco on Wednesday to share their problems and figure out a way to deal with the rising seas, increasing temperatures and uncertain weather.

Mayor Gavin Newsom addressed the city-sponsored climate summit at Yerba Buena Gardens. He spoke of the city's program to reduce carbon dioxide and other greenhouse gas emissions by encouraging green building standards, purchasing clean city vehicles and supporting renewable energy and energy efficiency. Coastal cities "must be strategic in adapting to the realities" of sea rise and acute weather patterns, Newsom said.

Some things are certain: The fixes will cost millions and tough decisions will have to be made on what to save from flooding and what to let go.

"San Francisco won't become the Venice of the West, and Silicon Valley won't become the lost city of Atlantis. Salt water won't come out of the taps in Southern California kitchens," said Will Travis, executive director of the Bay Conservation and Development Commission, which is studying the rising bay.

People will surely decide to build levees around the airports and a seawall along the San Francisco waterfront, he said. Flood control is already being incorporated into plans to convert the South Bay salt ponds to wetlands. In the state Legislature, competing plans are under

consideration for ways to store and reuse water.

But the harder choices will be made in some areas on the bay shoreline where it would be cheaper to remove low-value development and replace it with flood-absorbing wetlands. In the delta, planned new development might have to be stopped rather than face the cost of trying to protect it from inevitable flooding, Travis said. Eventually, it may take the insurance industry's refusing to write policies in coastal and low-lying areas to stop development, he said.

Because local politicians don't seem to be able to withstand the pressure of development, it may take state action to get involved in land-use decisions in flood-prone areas, said Contra Costa's Bishop.

Mary Nichols, a former California resources secretary and now a top official for the Los Angeles Department of Water and Power, told the meeting that the decisions on which properties to protect will inevitably involve race, class and poverty.

"This is an environmental justice issue. We're talking about neighborhoods, and people may be sacrificed. This will be hugely contentious," Nichols said.

At this point, there is no comprehensive estimate of the worth of the properties at risk from a 3-foot rise in bay waters, including the airports, Treasure Island, parts of Alameda, parts of the Peninsula and San Francisco's sewerage system.

In 1990, in the first -- and only -- assessment of the costs of rising bay, the Pacific Institute in Oakland determined that a 1-meter, or 39-inch, rise would threaten \$48 billion in residential, commercial and industrial property. The cost of constructing levees and seawalls, raising buildings, freeways and railroads and replenishing beaches would exceed \$940 million, not including the \$100 million-a-year maintenance costs.

The Pacific Institute's president, Peter Gleick, addressed the meeting Wednesday.

"The science of climate change is much stronger now, and these kinds of impacts are even more likely. We need to redo a comprehensive economic analysis of what's at risk and not just in the Bay Area but the state as whole," he said. "I just don't think we're doing enough, and I don't think we're doing it fast enough."

On Friday, the Intergovernmental Panel on Climate Change meeting in Paris will release updated assumptions about the planet's future, the first such assessment since 2001.

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Page B - 1

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