

Alameda Point: Planning Board weighs redevelopment plan

By Peter Hegarty phegarty@bayareanewsgroup.com San Jose Mercury News

Posted:

MercuryNews.com

ALAMEDA -- A waterfront neighborhood where seaplanes once came and went from San Francisco Bay will become the "Town Center" of Alameda Point and have homes, businesses and a ferry terminal under a draft plan that city officials are considering.

Bike and pedestrian paths, overlooks and a marina are also proposed for the neighborhood surrounding what's known as the Seaplane Lagoon at the former Alameda Naval Air Station.

But concerns about rising sea levels, increased traffic in the city's West End and fears that some proposed buildings could undermine the area's historic character were among the issues raised when the Planning Board considered the plan Aug. 21.

The special session was a chance for the public to weigh in on the proposals. It was also the first of a series of meetings scheduled through next year as city officials consider documents related to transit, transportation and zoning as they work to jump-start redevelopment at the former U.S. Navy base.

"The economy is getting better," said Jennifer Ott, chief operating officer for Alameda Point. "We are anxious to move this along and try and take it to the next step and move toward development."

The goal for the waterfront neighborhood is to create a "transit-oriented" hub where many of the proposed homes and apartments are near the ferry terminal to help minimize traffic, City Planner Andrew Thomas said. Currently, most of the 1,450 homes allowed under the city's agreement with the Navy are proposed for the area bordered by Ferry Point and Main Street.

Planning Board member John Knox White said he was concerned what kind of businesses would end up near the waterfront, including the possibility of a big box retailer, and whether the draft plan went far enough to examine traffic, including if people live near the ferry terminal.

"Transportation is really key here," said White, who noted that any redevelopment will affect traffic. "I think it will define how well this space works."

He also called for a more comprehensive effort to promote bicycle use.

"If we are going to create a low traffic impact we can't just keep designing things the way they are designed everywhere else," he said.

Water taxis could help promote the neighborhood as it is redeveloped, especially since people already come to the former base for the Alameda Point Antiques Faire and other events, Planning Board member Kristopher Koster said. Creating informal spots along the shoreline where sailors can stop and tie up their crafts for brief visits should also be considered, Koster said.

As part of redevelopment, city officials will review the design of the neighborhood's street pattern, especially the portion of West Atlantic Avenue that connects with Ferry Point since it provides a gateway to Webster Street. The corridor includes an area south of West Atlantic where the Navy is carrying out the

environmental cleanup of a site where jet fuel tanks were stored.

"It is being remediated," Thomas said. "But it will take many, many years for that to (completely) happen."

The city's preliminary plans call for commercial buildings on the site with possibly apartments on the upper floors, Thomas said. The city took ownership of about 1,400 acres of Alameda Point in June through a no-cost conveyance agreement with the Navy, which closed the base in 1997.

The agreement, the first phase of the base's overall transfer, provided the city with about 500 acres of land and nearly 900 acres beneath San Francisco Bay. Among the areas that still must be turned over to the city is the cleanup site south of West Atlantic. That is expected to happen in 2019, when the entire transfer of Alameda Point will be complete.

Design consultants Skidmore, Owings & Merrill LLP helped create the draft waterfront plan, which was funded by a \$200,000 grant from the Metropolitan Transportation Commission. While city officials are calling the area the "Town Center," they said that's only for reference and that any official name for the neighborhood would involve public input.

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Alameda: Work to begin soon on Crab Cove sand restoration project

By Dave Boitano Correspondent San Jose Mercury News

Posted:

MercuryNews.com

ALAMEDA -- Preliminary work on the restoration of Alameda's beach will get under way in the next week or so, a group of interested beach users learned last week.

Officials of the East Bay Regional Park District, which manages the beach for the state, and the City of Alameda gave a preview of the project Saturday at the Crab Cove Visitors Center as a sort of public kickoff to the work.

At more than 2 miles, it's the longest artificial beach in the Bay Area. But because it has no river or other sources to replenish it, sand must be replaced every few years to offset natural erosion and loss of beach because of major storms.

More than 82,000 square feet of new sand will be transported to Alameda and pumped through 14-inch plastic pipes from an offshore barge and poured onto the beach itself. Portions of the beach will be closed 1,000 feet at a time until the work is completed by the end of November.

Sand may not seem like a valuable commodity, but the total price tag for the project exceeds \$5.6 million. Funding will come from a variety of state and federal sources, including \$2.8 million in the park district's own reserve funds because the project's cost came in well over original estimates, said Park District director Doug Siden of Alameda.

"Sand is expensive," he said. "There's not too many places you can get it, so it's not competitive in that sense."

Though it would be cheaper to truck the sand to the beach, the park district board chose the more expensive barge method to avoid creating excessive truck traffic on nearby Shoreline Drive, Siden said.

Dipping into the park district's reserve fund to finance the restoration is proof of the district's commitment to the beach and Alameda but directors will have to consider how to finance this kind of work in the future, Siden said.

In addition to state and federal funds, the district is also getting \$100,000 from the Federal Emergency Management Agency to offset sand loss caused by a big storm in 2004-2005 and damage to area beaches because caused by the 2009 Dubai Star oil tanker spill, officials said.

Though a beach existed in many forms over the years, the large beach we see today was created in 1987 when the EBRPD deposited 400,000 cubic feet of sand. Plants were brought in to help keep down erosion but sand is lost to wave action and storms, said Diane Althoff, EBRPD chief of design and construction.

Waves move the sand toward Crab Cove almost the way a conveyor belt moves products, so maintenance workers must redistribute it from time to time.

"It's a dynamic beach, constantly changing," she said. "As long as we have a sand budget, we can maintain it."

Because work is being done during the fall, the project won't endanger birds and other wildlife that call the beach home, Althoff said.

Care will be taken to safeguard other environments in San Francisco Bay, including underwater grasses, according to Althoff.

"We just have to be mindful that we don't disturb the eel grass," she said.

The New York Times

Dot Earth

ANDREW REVKIN

AUGUST 22, 2013, 1:37 PM

Can Cities Adjust to a Retreating Coastline?

By [ANDREW C. REVKIN](#)

Last June, in rolling out an [ambitious \\$20-billion plan to gird New York City](#) against the impacts of rising seas and storm surges in a warming climate, Mayor Michael R. Bloomberg gave a classic “no retreat” [speech](#), including this line:

[A]s New Yorkers, we cannot and will not abandon our waterfront. It’s one of our greatest assets. We must protect it, not retreat from it.

Of course, who could ever imagine a politician standing on a coastline proclaiming, “We *will* retreat!”

But somehow, that’s what has to be done. Finding a way to have a realistic discussion of where to hold firm and where to pull back, where to gird and where to let nature dominate, has to happen to limit costs and other regrets in thousands of coastal cities and smaller communities around the world.

Klaus Jacob, an earth scientist at Columbia University whose [home just north of the city up the Hudson River was flooded](#) by the surge from Hurricane Sandy, has been calling the necessary urban design approach “[managed retreat](#)” (Reed Noss of the University of Central Florida has been making [the same argument in the context of wildlife conservation](#)).

Robust science, [clear for decades](#), shows there will be no new “normal” coastline for centuries, actually [millenniums](#), to come, even if greenhouse gas emissions are curbed.

Working to limit CO₂ emissions can substantially reduce the “locked in” amount of eventual sea rise, as [Anders Levermann](#) of the Potsdam Institute for Climate Impact Research ([with others](#)) recently calculated and Ben Strauss of Climate Central [effectively explained](#). Justin Gillis’s [recent column adds context](#).

But for the [seaside communities of today](#), the big questions still relate to the near term, meaning the rest of this century. [Tim Folger’s cover story in National Geographic](#) provides an excellent up-to-date overview of what’s known, and remains unknown, about the pace of coastal change in a warming world. The article also explores possible responses, and includes this apt comment from [Professor Jacob](#) about the status quo:

“The problem is we’re still building the city of the past,” says Jacob. “The people of the 1880s couldn’t build a city for the year 2000—of course not. And we cannot build a year-2100 city now. But we should not build a city now that we

know will not function in 2100. There are opportunities to renew our infrastructure. It's not all bad news. We just have to grasp those opportunities.”

Clarifying the pace of coastal retreats is incredibly important in judging how much, and how, to invest at any given time to limit losses over the long run. Unfortunately, decades of scientific research have not substantially determined what's likely in the near term (by 2100) even as the long-term picture of inundation remains robust. Revisit my [video discussions with ocean analyst Josh Willis of NASA](#) to learn more.

To chart the enduring lack of certainty, read the [various leaks from the forthcoming Intergovernmental Panel on Climate Change report](#) and you'll see roughly the same “maybe” forecast that scientists provided for my [1988 Discover Magazine cover story](#) on global warming (the climate panel was just being formed at that time).

Here's how I described one resulting paradox in 2008 in “[Melting Ice = Rising Seas? Easy. How Fast? Hard](#)”:

Most forecasting is easier and more reliable in the short run than over the long haul. Think of weather prediction. (And history is full of failed long-term forecasts of everything from oil prices to human population trends.)

But for scientists studying the fate of the vast ice sheets of Greenland and West Antarctica, the situation seems reversed. Their views of sea trends through this century still vary widely, while they agree, almost to a person, that centuries of eroding ice and rising seas are nearly a sure thing in a warming world...

My emails and calls to more than a dozen experienced ice scientists produced about a 50/50 split on whether Greenland or Antarctica was the biggest short-term risk.

But there was little disagreement that playing what amounts to two games of high-stakes poker at the same time by driving up greenhouse-gas concentrations is a bad idea, particularly as ever more people concentrate on coastlines in both rich and poor countries.

So [where does this leave you](#) if you live near a shore or run a coastal port, airport or city? Is the Bloomberg plan a good one or a stopgap that fits political imperatives of the moment while building bigger risks in the long haul?

A highly relevant new analysis, “[Future flood losses in major coastal cities](#)” ([Nature Climate Change, Aug. 18](#)) has come from a team led by [Stéphane Hallegatte](#), a senior economist at the World Bank. The paper is part of a continuing [research effort](#) by the [Organization for Economic Cooperation and Development](#) and builds on a broader World Bank initiative on warming and sea level called [Turn Down the Heat](#).*

Here's the study summary:

Flood exposure is increasing in coastal cities owing to growing populations and assets, the changing climate, and subsidence. Here we provide a quantification of present and future flood losses in the 136 largest coastal cities. Using a new database of urban protection and different assumptions on adaptation, we account for existing and future flood defenses. Average global flood losses in 2005 are estimated to be approximately \$6 billion per year (U.S. dollars), increasing to \$52 billion by 2050 with projected socio-economic change alone.

With climate change and subsidence, present protection will need to be upgraded to avoid unacceptable losses. Even if adaptation investments maintain flood probability, subsidence and sea-level rise will increase mean annual losses by between 15 and 22 percent in 2050 on top of the increase due to socioeconomic changes. To maintain flood risk, adaptation will need to reduce flood probabilities below present values. In this case, the magnitude of losses when floods do occur would increase, often by more than 50 percent, making it critical to also prepare for larger disasters than we experience today. The analysis identifies the cities that seem most vulnerable to these trends, that is, where the largest increase in losses can be expected.

Hallegatte sent three findings translated from paper jargon to language that even a mayor could understand:

- For the first time, this study takes into account existing coastal defenses. And we find that because of these defenses — and the way they have been designed for the current environmental conditions — the cities are very vulnerable to even moderate changes in sea level. Cities that are very well protected today are particularly vulnerable to such a change. Compared with previous studies that found that losses increase regularly with sea-level rise, we find a much sharper increase with sea level because of this effect. In policy terms, what it shows is that major investments in coastal protections will be needed in the next decades, at a high cost (\$50 billion per year for the 136 cities). This is probably easy for rich cities, but it is more challenging for poor countries.
- The cities where the risk will increase most are not the cities where the risk is particularly high today (such as around the Mediterranean basin). So, cities where flood risk is not a priority today will have to take this problem seriously. And it is a challenge: one cannot see an increase in risk; what we see is the disaster when it is too late. The challenge for these cities is to do something about the increase in risk before the disaster hit. We know that this is politically difficult.
- Adaptation can decrease the probability of a disaster occurring, but all the cities will become more vulnerable to a failure in defenses, or to an exceptional event that exceeds the defense design. It means that floods — when they occur —

will be larger in the future. It calls for better crisis management and contingency planning (including early warning systems and evacuation), reconstruction planning, and international collaboration, especially when poor countries are affected (or when small countries are hit, since for them it can be the entire national economy that is stalled by a flood, making them unable to manage the recovery and reconstruction).

As a side result, the U.S. appears particularly vulnerable, with defense standards much lower than countries with similar income (and even lower than many developing countries).

In a subsequent note, Hallegatte added this sobering thought, which builds on [his earlier research](#) (which I cited as [New York and New Jersey reeled](#) under Sandy's surge) on the factors leading to mega-disasters:

[A]n important limit of adaptation is that it can reduce the probability of floods (by raising defenses), but it also increases the losses when a flood does occur (that is, when the defenses fail or are exceeded by an exceptional event).

Basically, with adaptation we're moving to a world that is better protected, and therefore more dependent on these protections, and more vulnerability to their failing.

Getting comfortable with the reality of no new normal coastline is clearly an imperative in the [Anthropocene](#), this era (long or short; it's up to us) in which Earth is increasingly a human-shaped system.

Update, 3:40 p.m. | * At the asterisk above, I incompletely described the genesis of the Hallegatte paper, leaving out the [Organization for Economic Cooperation and Development](#).

Update, 3:53 p.m. | I just recalled that my old friend Mike Lemonick wrote an excellent piece in 2012 for Climate Central focused on the response of coastal communities in Florida to sea-level realities. Here's the opener and a link to the rest:

It's not unusual for Keith London to run into people who doubt that global warming is really such a big deal. "I tell them, 'the ocean is rising,' " he said. "They say, 'so?' It drives you crazy."

London is no scientist; he's a city commissioner in [Hallandale Beach, Fla.](#), a municipality of about 37,000 that sits on the Atlantic coast between Fort Lauderdale and Miami. But he talks to scientists and engineers all the time as part of his job, and the story they tell him isn't pretty. "The average elevation in Florida is 6 feet," London said. "Some places are as little as 3 feet above sea level. And sea level is going to rise as all that ice in the Arctic melts." [[Read the rest.](#)]

Updated, Aug. 23, 11:59 p.m. |

The report from President Obama's Hurricane Sandy Rebuilding Task Force, [released this week](#), is relevant. Here's [a related Times editorial](#), published Friday.

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The New York Times

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Idealized or Caricature, Architectural Renderings Are Weapons in Real Estate

By **ELIZABETH A. HARRIS**

In recent weeks, two competing illustrations have popped up in different corners of the Internet. In one of them, eight silvery towers perch at the waterfront of Greenpoint, Brooklyn, like a fleet of sailboats waiting peacefully for their captains. In the other, swollen and clearly exaggerated buildings the color of sickly flamingos loom over a diminished Manhattan skyline, threatening to swallow their neighbors in a gluttonous fit.

Despite their differences, these two renderings depict the same development, called Greenpoint Landing. One illustration was created by the project's developer several years ago to give a sense of the permissible size and scale on that site. The other was drawn by the project's opponents just a few weeks ago. Guess which is which.

"The renderings presented to us at community meetings were coated in a gloss of trees and leaves and flowers, and translucent towers blending into the sky," said Bess Long, a member of a group called [Save Greenpoint](#), which created the sick-flamingo rendering. "Ours was to express the brutality."

An architectural rendering is a premonition of sorts, an illustration of what a park or a bridge, an apartment building or an office tower, might look like, even before the first splash of concrete licks the ground. But its most important mission is not to show the girth of a building's footprint or the shape of the windows; it is to gin up enthusiasm for a project, or to incite resistance.

So the real purpose of these drawings is not to predict the future. Their real goal is to control it.

"I would say your point of view is key," said [Craig Copeland](#), a senior associate principal at [Pelli Clarke Pelli Architects](#). "A rendering is just a tool to amplify discussion."

This particular type of megaphone has a long and feisty history in New York City. In "The Power Broker" by Robert A. Caro, for example — which chronicles how Robert Moses plowed his vision for New York into its parks, highways, bridges and public housing — a 1939 dispute is recalled over a bridge Mr. Moses hoped to build connecting Brooklyn to Battery Park.

“Moses’ announcement had been accompanied by an ‘artist’s rendering’ of the bridge,” Mr. Caro’s book explained, “that created the impression that the mammoth suspension span would have about as much impact on the Lower Manhattan landscape as an extra lamppost. This impression had been created by ‘rendering’ the bridge from directly overhead — way overhead — as it might be seen by a high-flying and myopic pigeon.”

So opponents drafted renderings of their own, Mr. Caro wrote. One illustration included in his book shows the bridge at the forefront all but swallowing the sad looking buildings behind it. Another includes helpful labels that detail views blocked and light “obliterated.”

Ultimately, President Franklin D. Roosevelt, no fan of Mr. Moses, killed the Brooklyn-Battery Bridge.

Drawing up an effective rendering, whether on a computer or by hand, is generally neither easy nor cheap, which places this tool of persuasion out of reach for most. (Ms. Long of Save Greenpoint is a former architect, and she worked with an artist and a photographer to make the group’s rendering.) But when architects market their services to clients, or when developers address community boards, they often bring along a lush illustration.

“It’s a sales technique,” said Michael Devonshire, an architectural conservator at [Jan Hird Pokorny Associates](#) and a member of the Landmarks Preservation Commission. “I would be surprised if any finished product ever looked like the rendering.”

Take, for example, an [early rendering](#) of One57, the city’s tallest and most expensive residential tower, which puts forward the building’s most palatable possible face, even to Andrew S. Dolkart, the director of the historic preservation program at Columbia University, who describes One57 as probably [the most hated building](#) in the city at the moment.

“This brilliantly uses light to make the building disappear as it goes up,” Mr. Dolkart said when asked to examine the rendering, which reflects the blue sky and the clouds, the sun’s sharp reflected glare nowhere to be seen. “It’s like it’s dissolving into the sky.

“And I don’t really see the hideous colors,” he added, describing strips of different blues that extend up the building’s skinny face.

A spokeswoman for One57’s developer, Extell, said in a statement that the rendering accurately represented the building’s “massing” and “tonality.”

Alfred Bradshaw, vice president of Greenpoint Landing Associates, said the current design for the Greenpoint project used materials like brick and casement windows that would blend with the neighborhood’s older buildings.

Three years ago, when [Vornado Realty Trust](#) sought approval from the City Council to build a skyscraper down the street from the Empire State Building and within 34 feet of its height, it, too, invoked a sparkling rendition of the building, designed by Pelli Clarke Pelli Architects. In that [rendering](#), 15 Penn Plaza, as the building was called, was set, tall and elegant, against a pink Midtown sunset. The building almost seemed to glow from somewhere deep within its base, as if lit by a big pile of burning money.

In response, [other renderings](#) surfaced. One showed the silhouette of the Empire State Building and its big new neighbor, seen from a faraway graveyard. Another offered a view of 15 Penn Plaza from the west, with the Empire State Building peeking gingerly from behind.

In a Council hearing, David Greenbaum, the president of the New York division of Vornado, said he was “somewhat troubled by the grossly misleading renderings that have been delivered to the press.” At the same hearing, Anthony E. Malkin, an owner of the Empire State Building, testified that 15 Penn Plaza was reminiscent of a Size 22 foot in a Size 12 shoe. “It’s just bloody big,” he said.

The building [was approved by the Council](#) in 2010 but shelved by Vornado this spring. Instead, the company announced that it would focus on reinvigorating the Hotel Pennsylvania, its building on that site — and a building that, conveniently, already exists.

You can walk over and see what it looks like right now.

Kiwis advance to America's Cup match vs Oracle

By ANTONIO GONZALEZ AP Sports Writer News Fuze

Posted:

MercuryNews.com

SAN FRANCISCO—Two sailing powerhouses that have spent the summer trading verbal jabs are finally set to meet in the ultimate grudge match—the 34th America's Cup.

Emirates Team New Zealand zipped through a thick fog and past Italy's Luna Rossa one last time Sunday, capturing the Louis Vuitton Cup challenger series 7-1 and advancing to the premier event against defending champion and bitter rival Oracle Team USA.

The best-of-17 America's Cup starts Sept 7.

"It's really important. I mean, it's really important," said Team New Zealand managing director Grant Dalton, who also serves as a grinder even though he's 56. "The team understands that. When you give a speech to a yacht club here in San Francisco, the one thing my granddad always taught me is you don't start a speech with an apology, and I always do start with an apology. The only reason we're in San Francisco is to take the Cup away."

The Kiwis crushed the conditions and the competition in the challenger finals.

The closest margin was 1 minute, 28 seconds, and Luna Rossa's lone victory came when Team New Zealand dropped out because the electronics system that controls the hydraulics of its catamaran failed. The Kiwis won the final race—the lightest wind of the series thanks to a fog that blanketed San Francisco Bay—by the largest margin: 3:20.

The Kiwis sounded their horn as they crossed the finish line and sprayed sparkling wine on the boat from nearby Napa Valley while taking a victory lap near thousands who crowded the corner piers.

This is the fifth time since 1995 Team New Zealand has reached the America's Cup match. The only time it didn't make it was 2010, which was a one-off between Oracle and Switzerland's Alinghi following a bitter court fight.

Skipper Dean Barker believes the challenger series helped Team New Zealand learn the course and polish its performances, foiling faster—and even upwind—and pulling off more foiling gybes under all kinds of currents and conditions. Luna Rossa skipper Max Sirena, whose team has always touted this summer as stepping stone to the next America's Cup, said the team accomplished its goals and will continue to sail against the Kiwis in practices to help both crews build experience.

The Emirates and Oracle teams aren't even close to that cooperative. About the only thing both sides can agree on is the series should be close.

In a race for the oldest active trophy in international sports, the bitterness between both offers one of the more scintillating subplots in recent America's Cup matches.

Dalton and Barker both accused Oracle Team USA of cheating after it was revealed the U.S. syndicate illegally modified its boats in the America's Cup World Series, a warmup to this summer's racing.

Russell Coutts, a New Zealander who is CEO of Oracle Team USA, recently told The Associated Press that his syndicate is incredibly motivated because of Dalton's barbs.

"I don't have to give a motivational speech. This team is incredibly motivated to win. This has picked it up 10, 20, 30 notches. They can thank Grant Dalton," Coutts said.

An international jury is expected to rule on the matter as soon as this week. Sanctions against Oracle could include a fine, forfeiture of races in the America's Cup or disqualification from the regatta.

Oracle even filed a protest alleging that the Kiwis had trespassed to gather information in the case. Team New Zealand responded that the allegation was "laughable." Oracle withdrew its protest.

Additionally, Dalton and Coutts traded insults at a gala dinner in Auckland earlier this year. Dalton criticized Oracle Team USA owner Larry Ellison because his vision of a grand regatta with a dozen or more challengers fell far short, as the cost of the high-performance 72-foot catamarans and the perceived peril of sailing them kept several competitors out.

Coutts responded by criticizing Dalton's record and wondering why New Zealand couldn't find someone younger to sail on the boat. Coutts, 51, who won the America's Cup three times as a skipper and once as Oracle Team USA's CEO, doesn't sail on the U.S.-backed boat and didn't sail in the syndicate's two-race sweep of Alinghi of Switzerland in the 2010 America's Cup.

"They do look really good, but they've got to get through next week yet as well," Dalton said, referring to pending jury decision in another subtle swipe.

Despite the country each represents, the crews are quite contrasting.

Team New Zealand has a strong national identity, representing a small island nation where people are vastly outnumbered by sheep. Because they rely on government funding, the Kiwis have said Team New Zealand will cease to exist if it doesn't win the America's Cup.

"The culture of our team is our strength," Barker said.

Oracle, by comparison, has a multinational crew, including Australian-born skipper Jimmy Spithill. Only one American, tactician John Kosteki, was on Oracle's crew when it won the America's Cup in 2010.

How fast each team is won't be clear until they hit the water.

"We're apprehensive," Dalton said. "We think they're fast, but we don't know."

AP Sports Writer Bernie Wilson in San Diego contributed to this report.

Massive new wetlands restoration reshapes San Francisco Bay

By Paul Rogers progers@mercurynews.com San Jose Mercury News

Posted:

MercuryNews.com

NAPA -- The Carneros region in southern Napa and Sonoma counties has been known for years for chardonnays, pinot noirs and merlots.

But as the grapes hang plump on the vines awaiting the autumn harvest, this area along the northern shores of San Francisco Bay is growing a new bounty: huge numbers of egrets, herons, ducks, salmon, Dungeness crabs and other wildlife, all returning to a vast network of newly created marshes and wetlands.

Construction crews and biologists are in the final stretch of a 20-year project to restore 11,250 acres of former industrial salt ponds back to a natural landscape. The aquatic renaissance is already the largest wetlands restoration project ever completed in the Bay Area, turning back the clock 150 years and transforming the area between Vallejo and Sonoma Raceway, despite little public awareness because of the distance from the Bay Area's large cities.

"It's a stunning achievement," said Marc Holmes, program director with the Bay Institute, an environmental group in San Francisco. "It's a phenomenal ecological restoration, one of the most important coastal wetlands projects ever done in the United States."

The restoration -- encompassing an area as big as 8,500 football fields -- is also offering a road map for similar projects now underway in the East Bay and Silicon Valley, particularly the massive restoration of 15,100 acres of former Cargill Salt ponds that extend from Hayward to San Jose to Redwood City.

During a recent afternoon, fishermen in boats motored through parts of the new Napa-Sonoma marshes that look like the Florida Everglades, past flocks of ducks, thick grasses and even the occasional harbor seal. Only a decade ago the area was a dry, desolate expanse of mud caked with white salt crystals.

On Friday morning, a group of local political leaders, nonprofit groups and government agencies plan to meet at the Napa-Sonoma marsh area to commemorate one of the last steps in the restoration. They'll mark the completion of a 3.4-mile pipeline to connect the Sonoma Valley County Sanitation District treatment plant with the marsh complex.

The \$10 million pipeline will take up to 550 million gallons a year of treated wastewater to two former salt ponds, where it will dilute a highly saline byproduct of salt-making called bittern, so it can be slowly released to the bay.

"We are bringing back the bay," said Grant Davis, general manager of the Sonoma County Water Agency, which oversaw the pipeline construction. "This is called the Bay Area for a reason. The bay is what defines us."

After the bittern has been diluted, the recycled water will be used for growing grapes in the Carneros region, decreasing farmers' reliance on pumping groundwater.

Since the Gold Rush of 1849, San Francisco Bay has shrunk by a third, as people diked, dredged and

filled its waters to create hay fields, housing subdivisions like Foster City, even airport runways. The rampant filling largely stopped in the 1970s, with the advent of modern environmental laws such as the federal Clean Water Act.

Since the 1990s, biologists, environmental groups and government agencies have been restoring wetlands around the bay, slowly pushing it back into its historic footprint. The new wetlands not only expand wildlife and public recreation, they also offer a buffer to reduce flooding as sea levels continue to rise because of global warming, scientists say.

And unlike other environmental restoration projects -- such as replanting a clear-cut redwood forest, which can take 100 years or more to come to fruition -- the payoff with wetland restoration begins almost immediately.

Once earthen levees are breached, bay waters thick with fish, crabs, plant seeds and other life come pouring in, which in turn draw everything from steelhead trout to avocets to snowy egrets looking for a meal.

"Once you open these areas to the tides, Mother Nature takes care of it," said Amy Hutzel, program manager with the state Coastal Conservancy, a government agency that oversaw the marsh restoration. "The sediment, the plants and eventually the animals come back really quickly."

The Napa-Sonoma marsh area was part of the bay until the 1860s, when farmers began diking and filling it. In fact, the word "Carneros" is Spanish for "the ram," a reference to the shepherders and dairy farms of the 1800s. By the 1950s, salt companies began building huge salt evaporation ponds, cultivating salt for food, road de-icing and other uses.

Everything changed in 1994, when the previous owner, Cargill Salt, sold the property to the state for \$10 million. Much of the money came from a \$10.8 million court settlement paid by Shell Oil to compensate for a 1988 oil spill it caused in Carquinez Strait.

Crews working on the North Bay Cargill salt ponds restoration ran into numerous setbacks, including funding shortfalls and not knowing how to stop the ponds from making salt at first.

Eventually the whole project, which will cost roughly \$40 million, was funded through state and federal money, including bond funds.

Agencies that worked on the project, including the Army Corps of Engineers, the Coastal Conservancy and the U.S. Geological Survey, learned lessons that are helping with other Cargill restoration projects further south.

For now, outdoor lovers, fishermen, duck hunters and the project planners are reveling in their newfound creation. Striped bass, endangered shorebirds and even bat rays are back.

"What's the saying: If you build it, they will come?" said Larry Wyckoff, a biologist with the state Department of Fish and Wildlife, which owns the site. "Well, that's what's happening."

Paul Rogers covers resources and environmental issues. Contact him at 408-920-5045. Follow him at [Twitter.com/PaulRogersSJM](https://twitter.com/PaulRogersSJM)

if you're interested

For information about how to visit the Napa-Sonoma marsh area, go to www.dfg.ca.gov/lands/wa/region3/nsmwa.

Warriors arena schedule lags, costs jump

John Coté

Updated 10:49 pm, Sunday, August 25, 2013

The Golden State Warriors' plan to build a waterfront arena in San Francisco is months behind its original schedule, and the repair cost for piers to hold the venue has increased by as much as \$50 million, city documents show.

The team could miss its 2017 targeted opening, and the new figure - if it holds - raises the question of who would cover the bill.

The basketball franchise's representatives dispute the cost projection and downplay the delays as routine for a complex project. They maintain that the arena will be ready for the start of the 2017-18 NBA season but acknowledge their schedule is tight - and doesn't leave much room for unforeseen problems.

"When we began this project, we laid out a timeline that had a built-in cushion for the natural delays that occur on a project of this size," said Nathan Ballard, a Warriors spokesman on the arena plan. "We've got a lot of work to do in a short time frame, but we are confident we can complete it by 2017."

Mayor Ed Lee has called the arena "my legacy project." If successful, it would bring an 18,000-seat entertainment arena to the waterfront on Piers 30-32, just south of the Bay Bridge. The controversial proposal includes two parking garages, a hotel and a condominium tower on a 2.3-acre parking lot just across the Embarcadero, and more than 130,000 square feet of retail space spread across both sites.

The initial \$1 billion price tag is now even higher, thanks to the escalating cost of rehabbing piers that have been a development graveyard.

At least five groups have given up on plans to build on Piers 30-32 since 1990, most recently billionaire Oracle co-founder Larry Ellison as part of the America's Cup regatta.

Rebuilding piers

A tentative financial framework between the Warriors and the city calls for the team to pay up front to rebuild the slowly crumbling piers, which the city would continue to own and lease to the team for 66 years.

The city would then reimburse the Warriors up to \$120 million for the rehab work from revenue generated by the project.

A nonbinding term sheet is months from being finalized, but team and city officials said they are scrapping a contentious provision that would have entitled the Warriors to 13 percent interest on unreimbursed construction costs.

Opponents of the project - concerned about crowds, traffic, obstructed views and commercializing the waterfront - had seized on the interest rate, some calling it "criminal."

Cost projection disputed

The cost of improving the piers, though, is now up to \$170 million, according to a city memo.

The Warriors' project manager for the arena, Jesse Blout, dismissed that figure as too high and said he was unaware of its source. Blout said he has seen a range of cost projections, but none as high as \$170 million.

The memo, obtained by The Chronicle from the port's executive office through a public records request, summarized a meeting between engineers for the port and team. It didn't specify beyond "the Warriors" who attended.

Those working on the project said figures are still in flux depending on various designs under consideration, built-in contingency funds and other factors.

"It's a snapshot of an ongoing conversation that's continuing to evolve," said Jennifer Matz, the mayor's director of waterfront development. While the exact repair cost is still being determined, a Warriors representative said it was "clearly more than \$120 million."

Still, the city's reimbursement would remain capped at \$120 million, said P.J. Johnston, a team project spokesman, although he left open the possibility of other financial considerations.

A year ago, the team was projecting the repair costs at \$100 million. The port memo indicates that figure had already risen to \$130 million by July.

The Warriors replaced engineering and design firm AECOM last spring with Rutherford + Chekene, a structural and geotechnical engineering firm, for the substructure work. The new firm proposed a different design, including the types and number of reinforcing

piles, which drove up costs to \$170 million, the memo says.

Replacement firm

The Warriors also brought in Manica Architecture of Kansas City, Mo., this summer to replace AECOM for work on the arena itself and related buildings. The firm Snøhetta remains the lead architect, and AECOM will continue as a consultant on the project.

The Warriors insist that their engineering reshuffle won't delay a 2017 opening, but the team is months behind the project schedule set in November for financial agreements and completing environmental review.

Shifting dates is standard for big projects, Johnston noted, and they still have time to complete everything before fall 2017. But there is little margin for error in a project that could face lawsuits and is also waiting on legislation in Sacramento that would endorse it as a public benefit, a finding needed for waterfront development.

A draft of the state-required environmental impact report was supposed to be released in June, according to the project schedule from November. Instead, that draft report won't be ready until early next year, said Chris Kern, the senior city planner handling it. The Planning Commission was to vote on the final environmental report in December. That is not expected to happen until late 2014, Kern said. Construction and other permits, including from the Bay Conservation and Development Commission and the Army Corps of Engineers, can't be granted until the environmental report is certified. The team is planning on construction lasting about 2 1/2 years.

"What they're doing is refining the engineering, and it's an important detail for the environmental analysis," Kern said. "We need ... the number, size, type of piles, the schedule and the methods - all of that detail. We don't have it yet. We know they're working really hard on that."

Transportation issue

The lengthiest part of the environmental study involves perhaps the thorniest issue - transportation. That analysis has started, so the team contends that changes in other aspects - often in response to regulators, interest groups and others - won't impact the overall schedule as long as they're done before the transportation study.

An unforeseen complication, though, could force the team to play at least another year at Oracle Arena in Oakland or another venue.

That could be tricky for the Warriors, whose lease is up in June 2017 and whose decision to move to San Francisco has displeased East Bay officials.

Renegotiating that lease would involve striking a deal with the Oakland-Alameda County Coliseum Authority, which already wants the Warriors, if they leave as planned, to make up the difference on debt service payments for \$140 million in bonds used to upgrade Oracle Arena that still have about \$90 million in principal remaining.

Fine-tuning the arena project now, though, is the way to go, said Matz, the city's point person on the deal.

"With a project of this scope, if you're five degrees off where you need to be at the beginning, by the end, you're pretty far afield," Matz said. "It's important now to get the details right."

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Warriors face rising costs to play in bay

Ann Killion

Updated 3:49 pm, Wednesday, August 28, 2013

Rising costs, rising sea levels, rising community concern. Everything is on the rise when it comes to the Warriors' proposed arena on the San Francisco waterfront.

The Warriors insist that the arena will also eventually rise, that it is still on track to meet its projected 2017 opening date. But it continues to face obstacles.

"I think the Warriors have underestimated how high the hurdles for a project like this would be," said David Lewis, executive director of Save the Bay, a regional organization that has worked to protect San Francisco Bay for the past 52 years.

As Monday's front-page story in the Chronicle detailed, the estimated costs of construction continue to go up. Already expected to be a billion-dollar project, the costs of repairs to Piers 30 and 32 are now pegged at \$170 million, according to a city memo obtained by The Chronicle, up \$50 million from what had been projected. The Warriors dispute that figure but acknowledge that they aren't really sure what the costs will ultimately be because the design and engineering processes are still unfolding. But the team says that its huge round arena, rising 12 stories high beside the Bay Bridge, is right on track.

"It's very expensive to rehabilitate those piers," said Warriors president Rick Welts. "But we still have the highest level of confidence this project will be done."

In an interview with the San Jose Mercury News last month, owner Joe Lacob said of the process, "Without being arrogant or too confident, I would say we are killing it."

In the same interview, he characterized the opposition as "special interest groups and isolated individuals" and portrayed opponents as being orchestrated by East Bay politicians who want the Warriors to remain in Oakland.

But neighborhood opposition in San Francisco has been galvanized around issues of traffic, congestion and impacted views. Environmental groups are determined to protect the waters of the bay.

"Here in the Bay Area, there is generally pretty strong opposition to development in the bay," Lewis said. "People view that as something that was done in the past, not what we do anymore."

"There's no need to destroy the bay for unnecessary development. And that's what this is."

Lewis likens the way the arena issues are portrayed to a sports story: Will the Warriors beat the clock? Will they max out financially? Will they win? But his main concern is about the long-term impact such a project would have on the bay and the precedent it would set. The dilapidated piers - never intended to hold an enormous building - would have to be completely replaced, a process that would disrupt the environment and displace huge amounts of water.

There was an attempt to make an end run around bay protection laws, Assembly Bill 1273, sponsored by San Francisco Assemblyman Phil Ting. The bill aimed to fast-track the arena and circumvent the Bay Conservation and Development Committee. But the bill has been slowed down and changed in committee in Sacramento.

The climate in City Hall might be changing as well. While Mayor Ed Lee wants a legacy project, the last time the city politicians bought what a billionaire was selling they ended up with an America's Cup that hasn't provided the promised financial windfall. While Lacob isn't quite as rich and powerful as Larry Ellison, the city is - or at least should be - more wary of vanity projects.

Welts said a third round of design will be unveiled in October. The project has changed engineering and design firms and architecture firms. The environmental impact report process, which can't be started until the design is finished, is lagging far behind schedule. The cost keeps rising, along with the concerns, and there's always the promise of future litigation.

"There must," Lewis said, "be other places to build an arena."

Welts insists that there aren't.

"We are 100 percent focused on Piers 30/32," he said. "We're more convinced than ever that this is the best possible site for this project."

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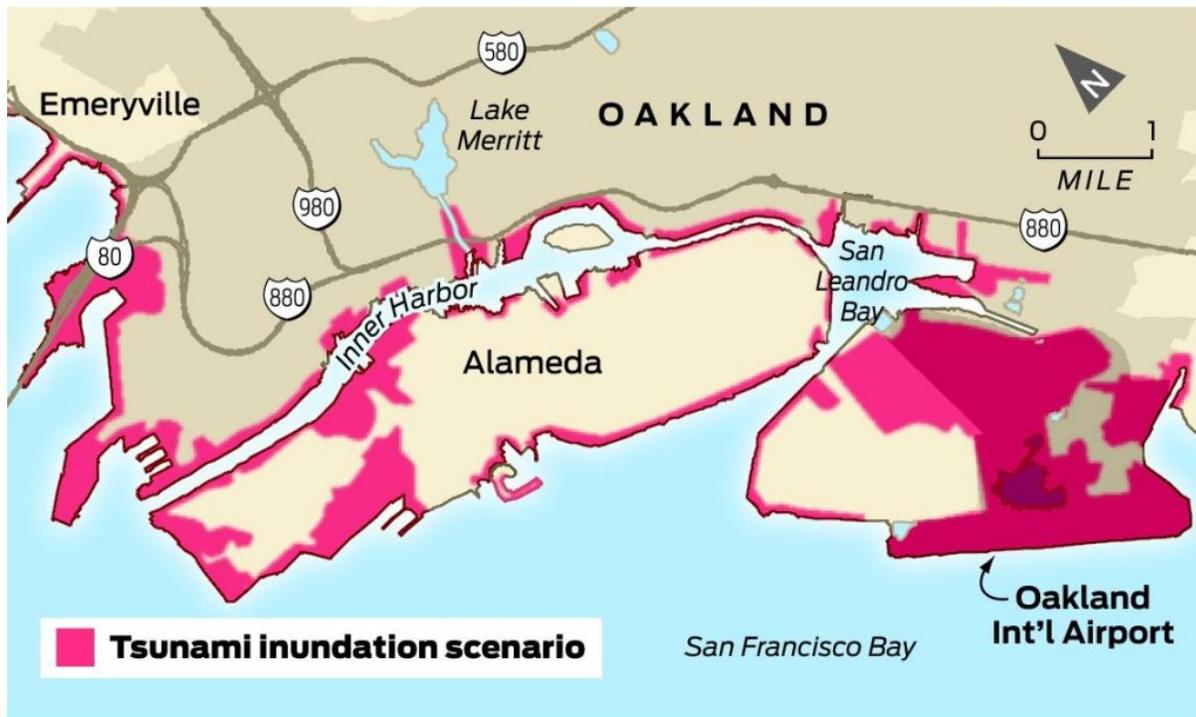
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How Alaskan quake could lead to California tsunami



Source: USGS

John Blanchard / The Chronicle

By David Perlman

September 5, 2013

A tsunami spawned by a huge Alaskan earthquake could hit the California coast at any time and cause at least \$10 billion in damage across the state, teams of scientists warned Wednesday.

The disaster would force at least 750,000 people to evacuate flooded areas, destroy port facilities in the Bay Area and Los Angeles, and send water surging up creeks, harbors and canals everywhere, the scientists said.

The scenario described by experts at the U.S. Geological Survey and scores of state and national specialists proposes a "hypothetical but plausible" event caused by a magnitude 9.1 quake. An Alaskan quake of that strength would cause waves up to 24 feet high that would batter California's low-lying coastal areas with only a few hours of warning, the scientists said.

Disaster planners who have worked for years assessing potential tsunami damage to California were spurred to update their 2009 flood maps and damage assessments by the magnitude 9 Japanese earthquake and tsunami in 2011 that flooded the Fukushima nuclear power plant and has left the devastated region still fearing radiation.

Waves from that tsunami rolled across the Pacific and caused \$50 million to \$100 million in damage along the California coast, the planners noted.

"Although this pales in comparison to the loss of lives and property in Japan," the Geological Survey's authors wrote, "the U.S. government must ask whether California, and the national economy, will someday face worse consequences from other distant-source tsunamis. Unfortunately, the answer is 'yes.' "

The survey, led by seismologist Lucile M. Jones, recruited more than 150 specialists from universities, state and local governments and coastal industries for the massive scenario project.

Tsunamis are most noted for their towering waves that hit shorelines, but also for the currents they produce as their waters surge into bays and harbors.

"Tsunami risks are rare but real and they can be very, very devastating," Jones said. "But it isn't just high waves that cause the damage, it's also the powerful tsunami currents that move the coast. If you're in a danger zone, you don't risk watching - you get out."



Bryant Anderson, Associated Press

These boats collided in Crescent City (Del Norte County) after a tsunami swept through in 2011, causing more than \$50 million in damage to the state.

Among the experts who prepared the tsunami report was industrial engineer Keith Porter, a University of Colorado professor who focused on potential damage to the broader Bay Area, from Marin to Monterey.

He and his team estimated that flood damage throughout that region could reach \$12 billion in total replacement costs - or at least \$1 billion in repairs - in 2010 dollars, with 6 percent, or \$60 million, added for today's costs.

BART flooding

Tsunami waves coming through the Golden Gate, Porter said, would pour over the Embarcadero and flood the BART tunnel south of Justin Herman Plaza at the foot of Market

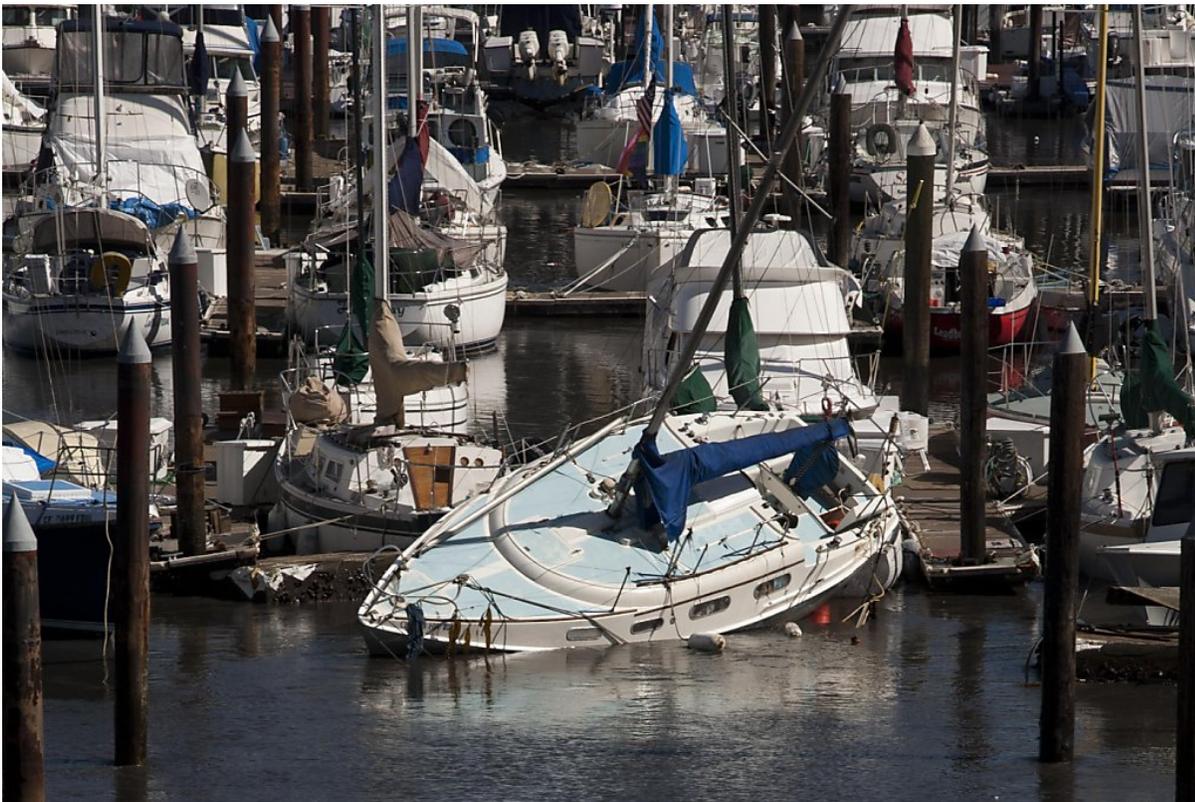
Street, demanding at least two days of pumping before trains could run again.

Flood damage would hit the low-lying areas of San Francisco and Marin, he said.

"Downtown Tiburon would be inundated, for example, and the water would flood Larkspur Landing and Corte Madera Creek," Porter said.

In Alameda County, the entire island that holds the city of Alameda and the former Alameda Naval Air Base would have flooding, Porter said. The Port of Oakland, which stretches for 19 miles along the city's waterfront, would be badly damaged both by flooding and strong cross currents, and the airport would be flooded, the report said.

As an engineer, Porter estimated that high water between Monterey and Marin would damage a total of 35 million square feet of buildings - the equivalent, he said, of 25,000 homes.



John Sebastian Russo, Special To The Chronicle

Boats docked at Santa Cruz Harbor slam against each other with each new surging wave from the tsunami that began pounding California's coast on Friday, March 11, 2011 in Santa Cruz, Calif.

Only hours of warning

Kevin Miller, the lead tsunami researcher for the California Office of Emergency Services, said that the Bay Area would have only five hours of warning of tsunami from an offshore Alaskan quake. The warnings would be sent by the U.S. tsunami warning center in Palmer, Alaska, giving notice ranging from four hours in Crescent City to six hours in San Diego, he said.

Fourteen Bay Area counties have already erected more than 6,000 tsunami warning signs instructing residents where and how to evacuate low-lying areas, Miller said, and more are being installed every day.

The Geological Survey experts reported that tsunami damage can be minimized wherever cities, harbors and low-lying communities are "resilient," and Porter, the University of Colorado engineer, defined resilience this way:

"It's how well prepared you are to resist the damage from a tsunami, and how well you're able to bounce back."

Adding up the damage

The Bay Area would be hit hard by a tsunami triggered by a 9.1-magnitude earthquake in Alaska, according to a report from the U.S. Geological Survey and developed by scientists creating a hypothetical scenario. Here are examples of the damage the scientists say could occur:

Docks: Many docks in the bay region's 30 harbors and marinas would be damaged, 1,100 boats would be sunk, 1,800 others would be damaged, and the total cost could reach \$120 million.

Boats: San Francisco's Pier 45 would be flooded, strong currents would sink or damage many fishing boats, and dock repairs could take two years.

Widespread flooding: Costs from building damage in 13 low-lying counties could reach \$2.6 billion, including contents of the buildings.

Flooded buildings: Damage would cost \$440 million to repair in San Francisco, \$290 million in Marin County, \$170 million in San Mateo County, and \$120 million in Santa Cruz County.

Waterfront: Along San Francisco's Embarcadero, the Cruise Terminal, the Port Headquarters, the Ferry Building and the Muni Tunnel would be flooded.

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