

REEF

RAPID ELECTRIC EMISSION-FREE FERRY PROGRAM

Decarbonizing Passenger Ferry Service

San Francisco Bay Ferry has the cleanest high-speed ferry fleet in the nation, and the agency is taking its commitment to lower operating costs and pollution to the next level with its **Rapid Electric Emission Free (REEF)** Ferry Program.

REEF is a transformative suite of projects to move SF Bay Ferry's fleet to zero-emission propulsion technology to reduce pollution and lower operating costs. The program includes the electrification of its key ferry floats and the launch of the nation's first high-speed, high-capacity zero-emission vessels, all without sacrificing the excellent service quality Bay Area riders depend on.

REEF PROJECTS

- **San Francisco Emerging Neighborhood Service:** Passenger service connecting Treasure Island and Mission Bay to Downtown S.F.
- **Downtown S.F. Terminal Electrification:** Terminal upgrades, including the implementation of first-of-its-kind universal charging floats
- **150-Passenger Build:** Procurement of three electric vessels from All-American Marine, expected in early 2027
- **400-Passenger Build:** Procurement of two electric vessels from Nichols Brothers Boat Builders
- **East Bay Ferry Electrification Project:** Electrification and implementation of charging infrastructure at key East Bay terminals and the Central Bay Operations and Maintenance Facility in Alameda.
- **Hydrus Class Electric Vessel Conversion:** Repowering SF Bay Ferry's 400-passenger Hydrus class vessels.

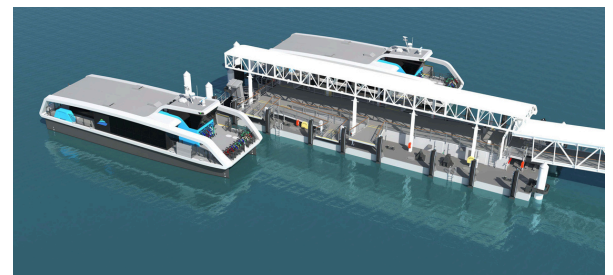


Safe, Fast, Reliable Ferries for More Communities

Amid SF Bay Ferry's development of state-of-the-art clean technology, the agency maintains its commitment to safe, fast and reliable ferry service for the Bay Area communities it serves.

With funding and permitting approvals, SF Bay Ferry's future plans include establishing new service in Treasure Island, Mission Bay, Berkeley, and Redwood City.

The agency plans to serve this growing system as well as pilot projects with clean vessel technology and continuing to lessen the greenhouse gas emissions caused by the region's overburdened transportation system.



Universal Charging Float rendering by Aurora Marine Design

PROJECT PHASES

Projects for the REEF program are planned in four distinct phases and include vessel operations planning, and terminal planning and construction.



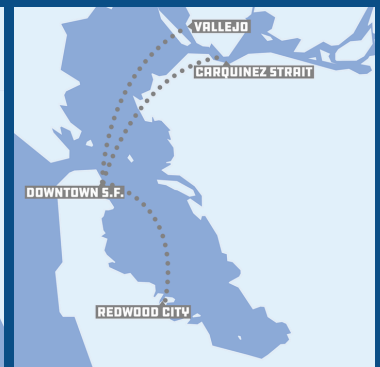
Phase 1: Inner Central Bay
Treasure Island, Mission Bay,
Downtown S.F.



Phase 2: Central Bay
Oakland, Alameda, Harbor Bay



Phase 3: Long Run Central Bay
South S.F., Berkeley,
Richmond



Phase 4: Long Runs
Vallejo, Carquinez Strait,
Redwood City

FUNDING REEF

SF Bay Ferry's REEF program is reliant on an infusion of federal, state and local funds to achieve the ambitious transition of at least 50% of the agency's fleet to zero-emission technology by 2035.

Funding secured so far: Total - \$252.1 million

- **Federal - \$131.9M:** EPA Clean Ports, FTA Passenger Ferry Grant Program, FTA 5307/5339 formula funds, DOT Carbon Reduction Program
- **State - \$76.9M:** Transit Intercity Rail Capital Program, State Transit Assistance, Low Carbon Transit Operations Program, CEC Clean Transportation Program, VW Mitigation Funding
- **Regional - \$42.8M:** Regional Measure 1, 2, & 3 Bridge Tolls, AB 664
- **Local - \$500,000:** Alameda County Measure BB

Full development, implementation, and operation of the REEF program is expected to cost \$455 million. SF Bay Ferry is pursuing funding opportunities from local, state, and federal sources, as well as strategic partnerships with organizations advocating for climate solutions and transit improvements.

REEF TIMELINE

- **2027:** Delivery of 150-passenger electric ferry
- **2027:** Launch of zero-emission Treasure Island service
- **2028:** Delivery of first 400-passenger electric ferry
- **2028:** Opening of Mission Bay Ferry Terminal
- **2028:** Electrification of Alameda Seaplane route
- **2028:** Installation of first Universal Charging Float

INDUSTRY PARTNERS

- All-American Marine
- Anchor QEA
- Arup
- Aurora Marine Design
- Ellen Johnck
- Elliot Bay Design Group
- Fast Ferry Management
- GHD
- Liftech Consultants
- Nichols Brothers Boat Builders
- P2S Engineering
- Point Energy Innovations
- Simpson Gumpertz and Heger
- Wartsila North America