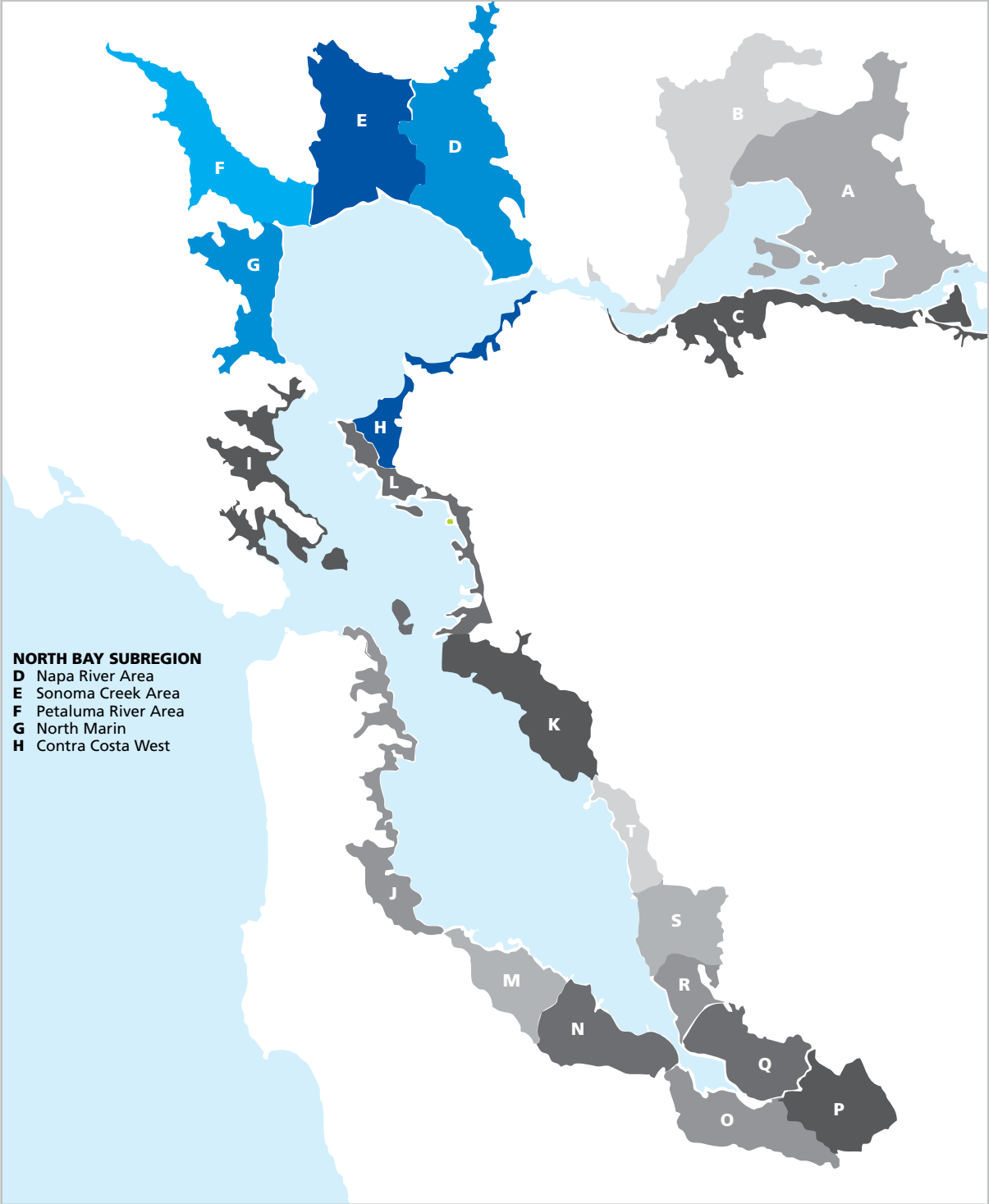


North Bay Subregion



North Bay Subregion

LANDSCAPE VISION

The North Bay is envisioned as encompassing large restored tidal marshes as part of a mosaic of dynamic, diverse, connected habitats from the bay to the watersheds, along with enhanced managed ponds. Achieving this vision involves restoring, protecting, and improving the natural processes necessary to sustain resilient habitats that can accommodate climate change. The North Bay has extensive agricultural and other relatively undeveloped lands with fairly intact natural processes, compared with other parts of the bay. Napa River, Sonoma Creek, Petaluma River, Tolay Creek, and Novato Creek provide significant freshwater inputs and deltas. As a result, the North Bay has significant opportunities to connect the baylands to their watersheds.

Recommended Actions

- ◆ Restore a broad swath of tidal marsh along the shore as soon as possible, with the widest marshes being in the Napa–Sonoma Marsh. Manage the fringing marsh bordering northern San Pablo Bay to sustain high marsh as sea levels rise by minimizing artificial drainage obstructions and maximizing wave processes that deposit coarser sediment. Protect and enhance native submerged aquatic shellfish and vegetation beds (including native oysters and eelgrass in the southern extent of this subregion), taking advantage of opportunities that arise as turbidity declines. Incorporate interior tidal ponds suitable for widgeon grass and pondweed in the restoration along tributaries.



Napa Ponds

- ◆ Reconnect major tributaries (Napa River, Sonoma Creek, Novato Creek, Tolay Creek, and Petaluma River) to extant tidal wetlands well into the watersheds. Restore riparian corridors, including floodplains, to connect the baylands to the lower watersheds. Protect wet meadows, vernal pools, and swales in the lowlands adjacent to the baylands and increase their connectivity to the baylands. Work with willing sellers to conserve valleys and plains with low-intensity agriculture adjacent to tidal areas for future marsh and transition zone migration.
- ◆ Elevate Highway 37 and modify or realign rail lines and other infrastructure to allow the full passage of water, sediment, and wildlife. Avoid placing new infrastructure on the baylands, and discourage new vineyards on diked baylands, where groundwater is likely to become saltier. Over time, eliminate barriers to stream flow and stop the exports of water from streams to irrigate vineyards.

RECENT RESTORATION

Significant progress toward this vision is under way in the Napa–Sonoma Marshes, at the former Hamilton Air Force Base, and elsewhere in Marin, Sonoma, Solano, and Contra Costa Counties, such as Sears Point, Skaggs Island, Cullinan Ranch, and Breuner Marsh. Some managed ponds are being managed to optimize waterbird habitats, and others are being restored to tidal marsh. Tributary streams and riparian vegetation are being protected and enhanced.

CHALLENGES

Achieving the North Bay vision is subject to significant infrastructure constraints, the presence of invasive species, extensive subsidence in potential tidal marsh restoration areas (and the subsequent need for significant amounts of sediment to raise elevations), and the need to address flood-management issues for adjacent lands. Private landowners and public entities will need to be willing to retrofit infrastructure like Highway 37 and SMART rail lines in keeping with ecosystem health and to conserve and restore lowland migration space for the baylands. Control of pepperweed, Pacific bentgrass, and stinkwort are of particular concern in the North Bay. Groundwater pumping depressions near El Verano and the city of Sonoma have the potential to induce an intrusion of brackish water from the baylands into groundwater.

The North Bay subregion includes segments D through H.