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STAFF REPORT: REGULAR CALENDAR

Consistency Determination No.: **CD-0003-18**

Federal Agency: **Federal Highway Administration**

Location: Sir Francis Drake Boulevard in Point Reyes National Seashore, Marin County **(Exhibit 1)**

Project Description: Resurfacing and/or reconstruction of roadway segments between Pierce Point and Chimney Rock Roads; widening sections of roadway to maintain a consistent 24-foot paved width; replacing culverts and constructing a bridge over Schooner Creek; stabilizing eroding roadway embankments and improving roadway pullouts; improving sight distances and roadway safety by modifying existing elevations, curves and cut slopes; and associated habitat improvements.

Staff Recommendation: Concurrence

SUMMARY OF STAFF RECOMMENDATION

The Federal Highway Administration (FHWA) submitted a consistency determination for improvements to 12 miles of Sir Francis Drake Boulevard in Point Reyes National Seashore in Marin County. The work includes widening sections of the roadway to maintain a consistent 24-foot paved width, replacing culverts, constructing a bridge over Schooner Creek, stabilizing eroding roadway embankments and improving roadway turnouts, improving sight distances and roadway safety by

modifying existing elevations and curves, and undertaking wetland habitat restoration at Drakes Beach and Home Ranch. The project is necessary in order to restore the structural integrity of the roadway and enhance public safety due to ongoing pavement deterioration, substandard roadway width in numerous areas, and roadway flooding. The project is located entirely on federal land within Point Reyes National Seashore, which is considered excluded from the coastal zone under the Coastal Zone Management Act. As a result, even if the resources affected by the project are the types of resources protected by the policies in Chapter 3 of the Coastal Act, if they lie exclusively within the Seashore and do not support resources outside the Seashore, they are not treated as "coastal" resources for purposes of the Commission's federal consistency review. Thus, in its evaluation of the project's consistency with those resource protection policies, the Commission analyzes spillover effects on resources located beyond the seashore boundary.

The project is an allowable use under Section 30233(a)(4) of the Coastal Act, and while it is the least environmentally damaging feasible alternative it will generate unavoidable permanent and temporary impacts to wetland habitats located immediately adjacent to the project corridor. However, these impacts will occur within the Seashore boundary, will affect primarily wetlands found in roadside ditches, and are minimized to the greatest extent practicable. The project includes mitigation measures to minimize adverse effects and more than offset them with new wetland creation and enhancement. The staff therefore recommends that the Commission find the proposed project consistent with the wetland policy of the Coastal Act (Section 30233(a)). The project includes erosion control measures to minimize adverse impacts to water quality within the project area, and would not cause significant adverse water quality impacts to coastal waters. The staff therefore recommends that the Commission find the proposed project consistent with the water quality protection policies of the Coastal Act (Sections 30231 and 30232).

The roadway improvements would generate temporary short term inconvenience to public access and recreation during construction periods, but these effects are unavoidable and more than offset by the project's overall long-term improvements to public access and recreation. Therefore, the staff recommends that the Commission find the proposed project consistent with the public access and recreation policies of the Coastal Act (Sections 30210, 30213, 30220, 30221, and 30223). Visual quality effects would arise from slightly enlarged cut slopes and vegetation removal necessary to provide a consistent and safe 24-foot-wide roadway. All disturbed areas would be revegetated with native plants and restored to pre-construction conditions and the project would not adversely affect scenic visual resources of the coastal zone. Therefore, the staff recommends that the Commission find the proposed project consistent with the visual resource protection policy of the Coastal Act (Section 30251). Based on the cultural resource inventory and evaluation work undertaken by the FHWA within the project area, and the concurrence by the State Historic Preservation Officer that the project would not adversely affect cultural resources, the staff recommends that the Commission find the proposed project consistent with the cultural resource policy of the Coastal Act (Section 30244).

The staff recommends that the Commission **concur** with the Federal Highway Administration's consistency determination CD-0003-18. The motion and resolution are on **Page 4** of this report. The standard of review for this consistency determination is the Chapter 3 policies of the Coastal Act.

TABLE OF CONTENTS

EXHIBITS

I. FEDERAL AGENCY'S CONSISTENCY DETERMINATION

The Federal Highway Administration has determined the project consistent with the California Coastal Management Program.

II. MOTION AND RESOLUTION

Motion:

*I move that the Commission **concur** with consistency determination CD-0003-18.*

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a concurrence in the determination of consistency and adoption of the following resolution and findings. An affirmative vote by a majority of the Commissioners present is required to pass the motion.

Resolution:

*The Commission hereby **concurs** with consistency determination CD-0003-18 by the Federal Highway Administration on the grounds that the project is fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program.*

III. FINDINGS AND DECLARATIONS

A. PROJECT BACKGROUND

The Federal Highway Administration's (FHWA) 2018 *Supplemental Environmental Assessment* (*SEA*) for the Sir Francis Drake Boulevard (SFDB) Improvement Project provides background information on the current condition of the roadway and the need for the proposed project. SFDB extends from Route 101 in Greenbrae, north of San Francisco, westward approximately 43 miles to the intersection with Chimney Rock Road and Lighthouse Road in Point Reyes National Seashore (Seashore), and is the primary north-south roadway within the Seashore (**Exhibit 1**). SFDB crosses a number of waterways and drainages, including East Schooner Creek, Schooner Creek, and their tributaries. The 12-mile-long segment of SFDB between Pierce Point Road and Chimney Rock Road runs through agricultural lands used for cattle grazing and passes through numerous ranches that are scattered across the peninsula. SFDB provides primary access to both ranching facilities and Seashore destinations, and is used by personal vehicles, National Park Service vehicles and shuttle buses tourist buses, school buses, milk trucks, hay trucks, recreational vehicles, and bicyclists.

The *SEA* states that purpose of the roadway improvement project is to:

. . . restore the structural integrity of SFDB and enhance safety for all users while reducing ongoing maintenance requirements. Within the project area, SFDB is narrow and deteriorating at an accelerated pace. The declining condition may necessitate vehicle restrictions or closures if not rehabilitated in the near future.

> *Between project mile (PM) 9 and PM 10, a 0.5-mile section of the roadway also floods seasonally, which restricts access because the road becomes impassible. SFDB was originally an unimproved dirt road that was chip sealed and has never undergone major rehabilitation. The existing pavement was not designed to handle the current traffic loads. Marin County* [which holds an easement for SFDB across the Seashore, and which pre-dates the 1962 establishment of the Seashore[1]] *has carried out partial and temporary repair projects over the years to keep the road operational and to meet the needs of the traveling public. SFDB is now at an age where a comprehensive repair project is needed to ensure continued service . . . .*

The *SEA* next examines the three elements that are driving the need for the road improvement project: pavement deterioration, substandard roadway width, and flooding (**Exhibit 2**). Regarding pavement deterioration, the *SEA* states that:

> *The existing pavement was not designed for the current traffic loads. Pavement along SFDB is badly oxidized, heavily patched, lacks shoulder support, and demonstrates significant cracking and edge damage in some sections. Potholes, edge raveling, and rutting in the wheel paths also exist. Standing water in shallow ditches has contributed to pavement failures between the Schooner Creek crossing and Rogers Ranch (approximately PM 10). The current deteriorating state of the roadway requires maintenance beyond normal pavement preservation, including frequent patching of potholes, patching of edge failures, and installing tubular traffic marker posts on the edge of the road to mark unsafe pavement edges undercut by water erosion. Maintenance can no longer keep the road open to vehicles at all times. One section of road is currently limited to two-way alternating traffic due to an edge failure and standing water on the road. The lack of a stable road shoulder is routinely causing vehicles to drop tires into roadside ditches (pers. comm. Mills 2015).*

The *SEA* next describes how substandard roadway width creates public safety issues:

> *Existing pavement widths on SFDB generally vary from 18 feet to 24 feet, with isolated areas as wide as 27 feet along switchbacks. The existing roadway has no shoulders in many areas. These narrow conditions provide little or no room for errant vehicles to correct without running off the edge of the road. Switchbacks on hills and flood-prone areas show evidence of tires dropping off pavement edges. The road width does not provide sufficient clearance for vehicles and*

[1] The *SEA* states that "Portions of what is now SFDB were developed between 1857 and 1877 to connect the peninsula's tenant ranches. In 1874 a new road was constructed between Tomales Bay and Drakes Estero, near Historic G Ranch. By 1916 the road from Inverness had been improved as far as Historic G Ranch . . . The road was paved in the 1920s and rerouted around the core of the Historic F Ranch. Residents requested road improvements from Historic G Ranch to the Point Reyes Lighthouse in 1924, and a bond was passed in 1925 to build a permanent road. Road construction quickly ensued, and by 1931 the road that is now SFDB took on its current alignment (NPS 2014e, Leach-Palm et al. 2015)."

> *bicycles to safely pass each other without traveling into opposing lanes. Larger vehicles, such as recreational vehicles, school buses, park shuttles, and milk trucks, frequently encroach into the opposing travel lane due to the narrow width of the road. This scenario not only creates safety concerns, but puts stress on the pavement edges, requiring additional maintenance. Drivers typically expect uniform or consistent roadway design, which can improve their ability to respond to situations on the roadway. The inconsistent widths along the project route present safety concerns because the roadway lacks the predictability users expect, particularly users who are not familiar with the roadway, such as tourists.*

The *SEA* states that adverse effects of flooding along sections of SFDB also drive the need for the proposed project:

> *Seasonal flooding along a 0.5-mile section of the roadway between PM 9 and PM 10 restricts access to various destinations and affects staff, visitors, and ranchers. Because of the existing narrow roadway width, vehicles are susceptible to running off the road and into ditches during flooding. In addition, East Schooner Creek crosses this section of SFDB through a culvert and flows through heavy brush and trees on the north side of the roadway until it flows into Schooner Creek. As a result of sediment deposits, the elevation of the creek channel has increased and is now nearly the same level as the roadway, resulting in standing water that has damaged pavement. Dredging the channel regularly as a maintenance measure is not feasible due to the presence of wetlands and potential for California red-legged frog (Rana draytonii), which is a species listed as threatened under the federal Endangered Species Act.*

As a result, the FHWA, in cooperation with Marin County and the NPS, has proposed the SFDB Improvement Project to address the above-referenced long-standing and ongoing maintenance issues. This proposed project follows a recently completed project implemented by the NPS. On September 16, 2014, the Commission's Executive Director concurred with negative determination ND-0024-14 submitted by the NPS for road improvement projects in the Seashore. This project consisted of rehabilitation and repaving of approximately 22 miles of roads and adjacent parking areas in order to improve roadway safety, avoid roadway failures, restore drainage features, reduce erosion, and prevent damage to wetland and riparian habitat adjacent to Limantour Road and associated parking areas, Lighthouse Road and Lighthouse Visitor Center parking area, Chimney Rock Road and associated parking areas, South Beach parking lot, and other roads and parking areas within the Seashore.

The proposed project is located entirely on federal land within Point Reyes National Seashore, which is considered excluded from the coastal zone under the Coastal Zone Management Act. As a result, even if the resources affected by the project are the types of resources protected by the policies in Chapter 3 of the Coastal Act, if they lie exclusively within the Seashore and do not support resources outside the Seashore, they are not treated as "coastal" resources for purposes of the Commission's federal consistency review. Thus, in its evaluation of the project's consistency with those resource protection policies, the Commission analyzes spillover effects on resources located beyond the seashore boundary. Subsequent sections of this report examine

project effects and determine whether those effects spillover into the coastal zone beyond the Seashore boundary.

B. PROJECT DESCRIPTION

The proposed project consists primarily of improvements to 12 miles of Sir Francis Drake Boulevard (SFDB) in Point Reyes National Seashore (Seashore) in Marin County. The road improvements would occur almost entirely within the existing SFDB right-of-way between the intersections with Pierce Point Road and Chimney Rock Road. The FHWA proposes ten miles of resurfacing, restoration, and rehabilitation of SFDB and two miles of full reconstruction of the roadway. The FHWA states in its consistency determination that the majority of the improvements are designed to closely follow the existing roadway alignment in order to minimize impacts to the natural terrain:

> *The project would widen the roadway 1 to 6 feet to maintain a consistent 24-foot paved width with two 11-foot travel lanes, 1-foot paved shoulders, and 1-foot wide graveled areas on each side of the paved surface of the road. The total pavement width would be 4 to 8 feet less than American Association of State Highway and Transportation Officials (AASHTO) and National Park Service (NPS) published guidelines. Given the sensitive environment, the proposed width is intended to allow much of the construction to occur within the existing roadway bench and the existing 60-foot-wide Marin County easement while providing for a rehabilitated pavement section.*

The consistency determination states that proposed roadway widening would include:

> *. . . pulverizing the existing asphalt pavement, overlaying with 4 inches of asphalt pavement, striping, and ditch reconditioning (regrading with dense vegetation removal as needed). Paved ditches between 1 and 4 feet wide with asphalt curbs are proposed in specific areas to minimize cut slopes, which would minimize overall ground disturbance—particularly to adjacent wetlands and other sensitive plant communities.*

Culverts and roadway pullouts would also be replaced or improved. Approximately 48 existing 15- and 18-inch culverts within the project area would be replaced with 24-inch culverts where feasible. Most of the replaced culverts would not require armoring because they are located in relatively flat areas where anticipated flows and thick vegetation would preclude the need for riprap. At culvert locations requiring armoring, Class 2 and/or Class 3 riprap would be placed at culvert outlets. At existing pullouts along the project corridor, a 5-foot asphalt apron (edge) would be added over the existing aggregate surface, and some pullouts would be resurfaced with aggregate. Only one pullout would be paved in its entirety. The remainder would maintain aggregate surfacing with the exception of the 5-foot asphalt apron (edge). Existing paved pullouts would be pulverized and repaved (**Exhibit 3**).

The consistency determination states that the clear zone along SFDB (the area available for safe recovery by errant vehicles) would be improved through removal of obstructions, including

clearing vegetation adjacent to the roadway as feasible. In order to minimize ground disturbance adjacent to wetlands and other sensitive resources, the clear zone would vary between 3 feet and the AASHTO (American Association of State Highway and Transportation Officials) minimum clear zone design standard width of 12 feet. Where the clear zone would be less than 12 feet wide, the FHWA must obtain roadway design exceptions since the proposed clear zones will not meet AASHTO standards.

In addition to the above-referenced general roadway improvements, the consistency determination also describes more specific reconstruction and safety improvements in certain areas within the SFDB right-of-way:

- *Between approximately STA 45+46 and STA 70+00, the vertical alignment of the roadway would be flattened and side slopes would be cut back, as needed, to improve sight distance.*
- *Between STA 101+00 and STA 112+00, near Historic B Ranch, the existing slope on the west side of the roadway would be cut back to accommodate the wider roadway.*
- *Between approximately STA 217+17 and STA 222+88, the surface of the roadway would be tilted or banked through the curve to improve driver safety, and side slopes cut back to improve sight distance.*
- *The two existing 6-foot by 10- to 11-foot wooden deck cattle under-crossings at STA 378+89 and STA 390+36 would be replaced with concrete box culverts approximately 8 feet high and 12 feet wide. The box culverts would be installed 2 feet below the existing ground surface to maintain a natural dirt floor.*
- *The two existing 84-inch diameter corrugated metal pipe (CMP) culverts at Schooner Creek (approximately STA 490+00) would be replaced with 57-foot-long, single-span bridge. The structure is designed to provide improved fish passage by reducing tidal and stormwater flow velocities. Approximately 750 feet of the roadway would be realigned by up to 12 feet to improve safety along the horizontal curves approaching the bridge, and the grade of the roadway would be raised by up to 3 feet (highest point over Schooner Creek).*(**Exhibit 4**)
- *The existing gravel pullout (approximately 0.06 acre in size) at approximately STA 499+29 by Schooner Bay would be paved with 4 inches of asphalt pavement to reduce erosion and maintenance.*
- *Between approximately STA 499+45 and STA 533+00, the roadway would be raised 1 to 4 feet and shifted approximately 12 feet to the south to reduce flooding of the roadway and to shift the roadway alignment away from the East Schooner Creek channel. Asphalt curb and gutter would be installed along the length of this section.*
- *The existing 60-inch diameter elliptical arch culvert at East Schooner Creek STA 529+37 would be replaced with a 12-foot by 6-foot by 64-foot concrete box culvert. The culvert would be installed at least one foot below the existing channel bed to maintain a natural bottom and accommodate fish and other wildlife passage within East Schooner Creek.*

- *Approximately 710 feet of biotechnical bank stabilization would be installed to re-establish the roadway embankment between STA 549+00 and STA 554+00 and 572+11 and STA 574+21. East Schooner Creek is currently eroding the roadway embankment thus affecting structural integrity of the roadway, driver safety, and actively increasing sediment loading into East Schooner Creek. Thus, under current conditions, water quality and aquatic habitat within the channel are adversely affected.*(**Exhibits 5 and 6**)

In addition, the proposed roadway improvement project also includes two habitat restoration projects in the Seashore. The consistency determination states that to compensate for unavoidable project impacts to wetlands as a result of roadway improvements, a wetland mitigation site would be constructed at the Drakes Beach parking lot (**Exhibits 7 and 8**):

> *The parking lot is located on Drakes Bay at the end of Drakes Beach Road, which is accessed via SFDB. The parking lot provides access to Drakes Beach, the Kenneth C. Patrick Visitor Center, and the Peter Behr Overlook Trail. Construction of the parking lot in the 1950s and 1960s resulted in filling a large wetland adjacent to Drakes Beach. The Proposed Action would remove approximately half of the existing parking lot (approximately 2 acres) in an effort to re-establish the historic wetland. The parking lot would be reconfigured from 399 spaces to 314 spaces. Surrounding upland areas would also be excavated to expand the mitigation site. Based on conceptual design, total wetland creation is anticipated to be approximately 2 acres of freshwater wetland with brackish components.*
>
> *Approximately 250 feet of a 4,400-foot sanitary sewer line, which is currently located below the asphalt segment of the Peter Behr Overlook Trail between Drakes Beach and the parking lot, would be lowered in place to facilitate restoration activities. The footpath, which leads to the scenic overlook trailhead, would be maintained for access to the overlook but the asphalt between the visitor center and the trailhead would be removed to facilitate restoration to a more natural dune. Fencing, consisting of pins and poles, may be placed along the trail alignment to guide visitors to the trailhead. In addition, there are three existing 24-inch corrugated metal pipe culverts located at the southern tip of the parking lot through which an unnamed intermittent stream flows into Drakes Bay. These culverts would be removed and the beach head lowered to an elevation that achieves desired wetland mitigation acreage and function while allowing for tidal influence and interaction upon the wetland over time.*

The consistency determination also describes a proposed project to compensate for unavoidable impacts to California red-legged frog (CRLF) aquatic breeding habitat (**Exhibits 9 and 10**):

> *. . . two ponds would be constructed within Home Ranch on PRNS to provide CRLF aquatic breeding habitat. These ponds may also be used to achieve wetland mitigation requirements. Home Ranch is one of several historic ranching properties within PRNS that is actively ranched by lessees. The ranch is located east of Drakes Estero and south of SFDB, accessed via Home Ranch Road, which*

> *leads to the Estero Trailhead (see Figure 1). The ponds would be constructed by excavating a pond bottom and side slopes, constructing a small dam and emergency spillway, and revegetating with native plants. The first pond, referred to as Pond 9, would be located approximately 1.3 miles south of the intersection of SFDB and Home Ranch Road. Pond 9 would total approximately 0.53 acres. The second pond, referred to as Pond 2, would be located approximately 3.5 miles south of the intersection of SFDB and Home Ranch Road. Pond 2 would total approximately 0.35 acres. Equipment access routes would be designated for construction use, but no formal access roads would be constructed.*

The *Final Supplemental Environmental Assessment – Appendix A* (August 2018) for the proposed project includes a detailed listing of mitigation measures and monitoring programs that will be implemented throughout the project construction period. The FHWA states that project construction is planned to begin in spring of 2019 with completion in 2020. The first season will consist of construction from the intersection of SFDB and Chimney Rock Road to the west end of the Schooner Creek crossing. In addition, wetland creation at the two Home Ranch ponds will occur concurrent with the first construction season. The second season will consist of roadway improvements from Schooner Creek to the northern terminus of the project at the intersection of SFDB and Pierce Point Road. Construction of the wetland mitigation at Drakes Beach will occur concurrent with the second construction season, when the majority of wetland impacts would occur.

C. Other Governmental Approvals and Consultations

National Park Service (NPS)
The Federal Highway Administration (FHWA) has applied to the NPS (Western Region) for a U.S. Department of Transportation Highway Easement Deed for modifications to the existing Sir Francis Drake Boulevard easement.

U.S. Army Corps of Engineers (USACE)
The FHWA has applied to the USACE for a Clean Water Act Section 404 Individual Permit and a Rivers and Harbor Act Section 10 Permit.

U.S. Fish and Wildlife Service (USFWS)
The FHWA will complete Endangered Species Act Section 7 consultation with the USFWS.

National Marine Fisheries Service (NMFS)
The FHWA will complete Endangered Species Act Section 7 consultation with the NMFS.

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB)
The FHWA has applied to the SFBRWQCB for a Clean Water Act Section 401 Water Quality Certification.

State Historic Preservation Officer (SHPO)
The FHWA undertook consultation with SHPO regarding project compliance with Section 106 of the National Historic Preservation Act, and received concurrence from SHPO on February 23, 2018.

Native American Tribal Consultation
The FHWA contacted the Federated Indians of Graton Rancheria (Graton Rancheria) beginning in March 2015 and through January 2018 describing the proposed project, requesting information on cultural resources important to the Tribe in the project area, and providing project development updates. The Commission staff has also reached out to Graton Rancheria, but has not, as of the date of this writing, received a response. If any such response is subsequently received, it will be reported to the Commission.

D. WETLANDS

Coastal Act Section 30233(a) states in part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*
>
> . . .
>
> *(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines . . . .*

The Sir Francis Drake Boulevard (SFDB) Improvement Project *Environmental Assessment* (August 26, 2015), *Supplemental Environmental Assessment* (August 31, 2018), *Joint Aquatic Resource Permit Application* (*JARPA*; June 22, 2018), and the consistency determination (October 2018) describe the wetland habitats present in and adjacent to the 12-mile-long SFDB Improvement Project corridor. As previously noted in Section III.A (Project Background), the proposed project is located on federal land; nevertheless the Commission generally considers wetlands effects on federal land to constitute a potential coastal zone resource effect, as they provide habitats serving coastal species occurring both on and off federal land. This section therefore examines project impacts to wetland habitat, in recognition of their spillover effects, and undertakes the standard Section 30233(a) analysis of those impacts.

The *JARPA* states that the SFDB corridor transitions from riparian forest and chaparral in the north to coastal scrub, coastal grassland, coastal dunes, and pastures as the road traverses west and south down the Point Reyes peninsula. Vegetation communities that occur within the project area, as grouped into broad vegetation types within the region, include dry coastal grassland/ open scrub, active pasture, moist coastal grassland, riparian forest, dune vegetation, dense coyote brush scrub, Bishop pine and mesic chaparral, and salt marsh. Almost half of the project corridor

is comprised of dry coastal grassland and open scrub habitat. Riparian forests, which occur in the northern 2.5 miles of the roadway corridor, are influenced by East Schooner Creek, which drains parallel to the road and supports dense stands of willow and red alder. Active pasture lands for dairy cattle begin west of the Schooner Creek crossing and are dispersed south through the project corridor to the SFDB and Chimney Rock Road intersection. The active pasture in the project area is extensively grazed by dairy cattle.

The project area contains approximately 17.5 acres of freshwater estuarine, riverine, and drainage ditch wetland habitat, comprised primarily of scrub-shrub and forested freshwater wetlands. Streams and drainages total approximately 0.8 acres and are primarily intermittent and ephemeral drainages that have formed adjacent to SFDB and roadside drainage ditches. Schooner Creek and East Schooner Creek are perennial streams that cross under SFDB. Thus, the project would involve filling of wetlands. The majority of wetland fill is the result of widening sections of the roadway to a consistent 24-foot width and select areas of roadway realignment. **Exhibits 11 and 12** illustrate typical roadway sections in the southern and northern sections of the project area, respectively. Minor fill also occurs as a result of culvert replacement at drainages under the roadway. The proposed project would result in approximately 2.9 acres of permanent impacts and approximately 2.3 acres of temporary impacts to wetland habitats along the SFDB corridor. The project therefore triggers the three-part test of Coastal Act Section 30233(a), so the Commission needs to analyze whether the project is an allowable use under this section, whether it is the least environmentally damaging feasible alternative, and whether adequate mitigation for wetland impacts is provided.

Allowable Use

Section 30233(a) of the Coastal Act limits uses involving wetland fill to seven categories of uses. The Commission has considered minor expansions to existing roads, railroad lines, and airport runways in certain situations to qualify as "incidental public service purposes," and thus allowable under Section 30233(a)(4), but only where no other feasible less damaging alternative exists and the expansion is necessary to maintain existing traffic capacity.

The Court of Appeal has recognized this construction of the phrase "incidental public service" as a permissible interpretation of the Coastal Act. In the case of *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517, the court found that:

> *. . . we accept Commission's interpretation of sections 30233 and 30240 . . . In particular we note that under Commission's interpretation, incidental public services are limited to temporary disruptions and do not usually include permanent roadway expansions. Roadway expansions are permitted only when no other alternative exists and the expansion is necessary to maintain existing traffic capacity.*

The FHWA states that the purpose of the project is to restore the structural integrity of SFDB, enhance roadway safety for all users, and reduce ongoing maintenance requirements. Within the project area, SFDB is narrow and deteriorating at an accelerated pace (**Exhibit 2**). The declining condition and roadway flooding between Project Mile 9 and 10 may necessitate vehicle restrictions or closures if not rehabilitated in the near future. SFDB was originally an

unimproved dirt road that was chip sealed and has never undergone major rehabilitation. The existing pavement was not designed to handle the current traffic loads. Partial and temporary repair projects constructed over the years to keep the road operational are no longer adequate, and SFDB is now at an age where a comprehensive repair project is needed to ensure public safety and access within the Seashore. The project does not add traffic lanes and only minimally widens sections of SFDB in order to create a consistent roadway width and meet minimal safety standards. The Commission agrees with the FHWA that the project is not designed to increase the capacity of SFDB, the project can be considered as a limited expansion necessary to maintain existing capacity of the roadway, and is therefore an allowable use as an incidental public service under Section 30233(a)(4).

Alternatives

Regarding the alternatives test of Section 30233(a) for the proposed project, the FHWA states in its consistency determination that alternatives for addressing the deteriorating condition of the roadway are constrained by the existing roadway location adjacent to wetland and listed species habitats. Nevertheless, the FHWA examined alternatives to the proposed project in the consistency determination, the 2015 *Environmental Assessment*, and the 2018 *JARPA*. The consistency determination examined the following alternatives:

1. No Action. Ongoing maintenance activities would continue to repair pavement edges due to substandard roadway widths and to repair general pavement damage, such as potholes, cracking, and rutting. This alternative would not meet the overall purpose of the project. Safety and access to the Seashore would continue to be compromised as the road continues to deteriorate and exacerbate existing safety concerns.

2. Design Standards. To meet NPS and AASHTO highway safety design standards, SFDB would need a pavement width between 28 and 32 feet, shoulder widths between 3 and 5 feet, clear zone widths between 10 and 12 feet, and improvements to 44 horizontal curves. This alternative would correct all substandard conditions along the roadway but would substantially increase ground disturbance, grading, and permanent impacts to wetland habitats adjacent to SFDB.

3. Narrower Width. Current road width ranges between 18 and 24 feet. An improved and consistent pavement width less than 24 feet would not accommodate safe vehicle passage or bicyclists.

4. New Alignment. Construction of a new roadway within an upland location north or south of the existing roadway would adversely affect scenic views, water quality, public recreation, existing ranching operations, and historic and cultural resources.

The FHWA also considered design alternatives for certain elements of the proposed project:

1. Open-Bottom Arch Culvert at Schooner Creek. This option was not selected as the proposed bridge improves tidal dynamics and fish passage compared to the existing twin culverts or a single open bottom arch culvert and results in fewer construction impacts.

2. On-Alignment Grade Raise. In the flood-prone section of SFDB, this option would raise the roadway 3 to 4 feet in the existing alignment, rather than shifting the roadway south. However, this option results in greater impacts to wetland habitat and floodplain dynamics, and would require construction of a temporary roadway with additional wetland impacts.

3. Causeway. In the flood-prone section of SFDB, this option would construct the roadway on an elevated causeway up to 65 feet north of the existing alignment and within the East Schooner Creek floodplain, with adverse impacts to floodplain dynamics, additional wetland fill, and increased permanent and temporary construction impacts. In addition, this elevated roadway would create adverse impacts to scenic views.

The Commission agrees with the FHWA that potential alternatives to the proposed SFDB improvement project are severely constrained by the location of the roadway and the sensitive environmental, visual, and historic resources within and adjacent to the project corridor and across the Seashore. The Commission finds that with the need to restore the structural integrity of SFDB and enhance roadway safety for all users, and with the project mitigation measures discussed in the following section, the proposed project represents the least environmentally damaging feasible alternative and therefore complies with the alternatives test of Section 30233(a).

Mitigation

In order to find the proposed project consistent with Section 30233(a), mitigation must be provided for any unavoidable wetland habitat impacts associated with the project. As noted above, the project will result in permanent adverse impacts to 2.9 acres and temporary impacts to 2.3 acres of wetland habitat along the SFDB corridor. The vast majority of these impacts are located in drainage ditches and culverts located immediately adjacent to the existing roadway (**Exhibits 11 and 12**). The FHWA has proposed a number of mitigation and impact minimization measures to address these project impacts: (1) 2.0 acres of wetland creation at Drakes Beach; (2) 0.76 acres of wetland creation at Home Ranch; (3) Mitigation Concurrent with Construction; (4) Schooner Creek Bridge; (5) Bank Stabilization at East Schooner Creek; (6) Impact Minimization Design Measures and Self-Mitigation; (7) Revegetation Plan; (8) Best Management Practices, and (9) Monitoring Plans.

The Drakes Beach and Home Ranch mitigation projects are described in the June 2018 *Supplemental Environmental Analysis*:

> Drakes Beach Wetland Creation (**Exhibits 7 and 8**)
> *To compensate for permanent wetland impacts as a result of roadway improvements, a wetland mitigation site would be constructed at the Drakes Beach parking lot. The parking lot is located on Drakes Bay at the end of Drakes Beach Road, which is accessed via SFDB. The parking lot provides access to Drakes Beach, the Kenneth C. Patrick Visitor Center, and the Peter Behr Overlook Trail. Construction of the parking lot in the 1950s and 1960s resulted in filling a large wetland adjacent to Drakes Beach. The Proposed Action would remove approximately half of the existing parking lot (approximately 2 acres) in*

an effort to re-establish the historic wetland. The parking lot would be reconfigured from 399 spaces to 314 spaces. Surrounding upland areas would also be excavated to expand the mitigation site. Based on conceptual design, total wetland creation is anticipated to be approximately 2 acres of freshwater wetland with brackish components.

Approximately 250 feet of a 4,400-foot sanitary sewer line, which is currently located below the asphalt segment of the Peter Behr Overlook Trail between Drakes Beach and the parking lot, would be lowered in place to facilitate restoration activities. The footpath, which leads to the scenic overlook trailhead, would be maintained for access to the overlook but the asphalt between the visitor center and the trailhead would be removed to facilitate restoration to a more natural dune. Fencing, consisting of pins and poles, may be placed along the trail alignment to guide visitors to the trailhead. In addition, there are three existing 24-inch corrugated metal pipe culverts located at the southern tip of the parking lot through which an unnamed intermittent stream flows into Drakes Bay. These culverts would be removed and the beach head lowered to an elevation that achieves desired wetland mitigation acreage and function while allowing for tidal influence and interaction upon the wetland over time.

Home Ranch Ponds (**Exhibits 9 and 10**)
The roadway and drainage improvements proposed along SFDB would result in permanent impacts to California red-legged frog (CRLF) aquatic breeding habitat, as well as permanent impacts to wetlands. To compensate for these impacts, two ponds would be constructed within Home Ranch on PRNS to provide CRLF aquatic breeding habitat. These ponds may also be used to achieve wetland mitigation requirements. Home Ranch is one of several historic ranching properties within PRNS that is actively ranched by lessees. The ranch is located east of Drakes Estero and south of SFDB, accessed via Home Ranch Road, which leads to the Estero Trailhead (see Figure 1). The ponds would be constructed by excavating a pond bottom and side slopes, constructing a small dam and emergency spillway, and revegetating with native plants. The first pond, referred to as Pond 9, would be located approximately 1.3 miles south of the intersection of SFDB and Home Ranch Road. Pond 9 would total approximately 0.53 acres. The second pond, referred to as Pond 2, would be located approximately 3.5 miles south of the intersection of SFDB and Home Ranch Road. Pond 2 would total approximately 0.35 acres. Equipment access routes would be designated for construction use, but no formal access roads would be constructed.

The Drakes Beach wetland restoration would provide 2.0 acres of wetland mitigation credit. The 0.88 acres of pond habitat created would provide 0.76 acres of wetland mitigation credit as 0.12 acres of wetland habitat currently exists within the footprint of the proposed pond sites.

As described previously in this report, these two mitigation projects would be constructed concurrent with construction of the SFDB Improvement Project. Improvements to SFDB between Chimney Rock Road and Schooner Creek, as well as wetland/pond construction at the

Home Ranch sites, will take place in 2019. Improvements to SFDB between Schooner Creek and Pierce Point Road (the area where most of the project wetland impacts will occur), and the construction of the Drakes Beach wetland project, will take place in 2020. This construction schedule was designed by the FHWA in order to minimize the temporal loss of wetland habitat resulting from SFDB roadway improvements.

Two roadway improvement elements, while causing short-term construction impacts, are designed to permanently improve aquatic habitat and function in the Schooner Creek watershed. The June 2018 *Supplemental Environmental Analysis* describes the habitat benefits arising from the construction of the Schooner Creek Bridge (**Exhibit 4**):

> *The two existing 84-inch diameter corrugated metal culverts at Schooner Creek (PM 9.2) would be replaced with an approximately 57-foot-long, single-span bridge rather than an open-bottom arch structure that was originally proposed in the 2015 EA/IS (see Figure 4). Between PM 9.1 and PM 9.3, approximately 750 feet of the roadway would be re-aligned by up to 12 feet to improve safety along the horizontal curves approaching the bridge, and the grade of the roadway would be raised by up to 3 feet (highest point over Schooner Creek). The estuarine channel width at high tide would be roughly 50 feet wide after bridge construction, approximately 36 feet wider than its current dimension. The Schooner Creek channel within that width would have a natural flat bottom for approximately 14 feet, with an additional 6 feet of channel bottom consisting of buried riprap. The channel bottom width would total 20 feet before sloping up for a bankfull width of approximately 36 feet at mean tide.*

The consistency determination states that the existing twin culverts channelize and constrict water flow from freshwater entering Schooner Bay and from tidal flows that intersect upstream habitats, making it difficult for fish to transition between freshwater and saltwater habitats. Replacement of the culverts with a free-span bridge will eliminate this man-made hydraulic bottleneck, allow the estuary to better function as a transition zone for fish and other aquatic organisms, and will markedly improve aquatic habitat quality at this location. This project element will create approximately 0.08 acre of new estuarine wetland habitat at and immediately adjacent to the SFDB crossing of Schooner Creek.

The June 2018 *Supplemental Environmental Analysis* describes the East Schooner Creek embankment stabilization project element, which is designed to stabilize eroding roadway sections and concurrently improve water quality and fish habitat at project locations (**Exhibits 5 and 6**):

> *Between approximately PM 10.3 and PM 10.8, East Schooner Creek has eroded away portions of the SFDB roadway embankment. The channel in this area varies between 4 and 12 feet wide and is approximately 18–24 inches in depth. Presently, the eroding roadfill is degrading aquatic habitat and water quality conditions through deposition of eroded sediment, and there is a risk of road failure. To restore and stabilize the roadway, approximately 710 feet of biotechnical bank stabilization would be installed to re-establish the roadway embankment in this area and function like a natural, densely vegetated*

streambank. Embankment stabilization would occur between approximately PM 10.3 and PM 10.4 and PM 10.7 and PM 10.8. Figure 5 shows a conceptual approach.

The consistency determination further states that in areas where the creek channel has undercut the roadway, it is anticipated that the creek will be shifted two to four feet horizontally to re-establish the creekbed, consistent channel width and depth, and the roadway embankment. Construction will be undertaken to minimize impacts to the existing channel and vegetation. Post-construction conditions at this location will be improved compared to existing conditions, as bank stabilization will halt ongoing erosion and will restore vegetative cover along the embankment that has been lost over time due to continued undercutting.

The FHWA determined that the proposed upgrading of the SFDB crossings of Schooner Creek and East Schooner Creek through bridge construction and culvert replacement, respectively, and the bank stabilization along East Schooner Creek, will provide a substantial benefit to salmon and steelhead habitat in these waterways:

- Restored or improved fish passage for all life stages of salmonids from the provision of access to suitable upstream habitat and enhancement of estuarine habitat.

- Restored natural channel substrate, reduced flow velocities, and improved tidal and freshwater mixing through a wider channel at the Schooner Creek crossing.

- Improved hydraulics and sediment transport with the new culvert crossing on East Schooner Creek.

These habitat improvements serve as additional mitigation for project-related impacts to wetland habitat along the SFDB project corridor. The equivalent mitigation credit acreage for these habitat improvements has not been calculated on a per-acreage basis; nevertheless the resource agencies and the Commission staff agree that they would provide benefits that more than adequately offset the project's wetland impacts, and the Commission concurs.

The proposed project includes numerous design measures to minimize and avoid impacts to wetland habitat in the project corridor, including pavement, shoulder, and clear zone widths less than NPS guidelines, paved roadway ditch sections to minimize project grading, design exceptions to roadway curves, and steepened cut and fill slopes to avoid wetland habitat. These design measures reduced permanent impacts to wetland habitat by five acres between the 15% design stage used in the 2015 *Environmental Assessment* and the final design in the 2018 *Supplemental Environmental Assessment* and consistency determination.

The FHWA also notes that roadside drainage ditch wetlands that are permanently lost due to roadway improvements, and whose acreage amounts are included in the 2.9 acres of permanent wetland impacts, will over time reestablish within roadside drainage ditches. The future acreage of these self-reestablished roadside wetlands is not possible to calculate at this time but these wetland areas will serve as additional mitigation for project-related wetland impacts. In addition,

all wetland habitats that are temporarily affected by construction activities will be restored on-site to pre-project conditions using local native plants and seeds.

Two project elements – the Schooner Creek Bridge and the Drakes Beach Wetland Restoration – were also designed incorporating sea level rise projections. The 2018 *Supplemental Environmental Assessment* states that:

> *. . . the NPS started a planning process to adapt the parking and visitor access facilities at Drakes beach to accommodate potential impacts of SLR (NPS 2014). The original EA/IS also identified flood potential related to potential SLR affecting Schooner Creek where it is crossed by SFDB.*
>
> . . .
>
> *. . . the approximately 57-foot-long, single-span bridge [over Schooner Creek] would result in a wider opening and additional clearance between higher water levels and the bridge. The higher elevation and wider bridge would therefore allow the creek to flow more naturally under the structure and adapt to SLR . . .*
>
> . . .
>
> *Similarly, restoring part of the historic wetland at Drakes Beach would help reduce impacts from floods that occur regularly in winter. Removing the southwest corner of the parking lot and restoring it to a wetland would also better absorb impacts form SLR in this area, as would removing and/or replacing the existing culverts which would restore the natural interface between the wetland and tidal waters.*

The FHWA undertook the design of the Drakes Beach wetland restoration project in cooperation with the NPS and other federal and state resource and regulatory agencies, including the Commission staff. The restoration project is designed to create a 2-acre freshwater wetland with brackish components, and the adjacent beach head at the southeast corner of the project site would be lowered to an elevation that achieves the desired wetland mitigation acreage and function. This would also allow for tidal influence and interaction with the wetland over time as sea level rises. The FHWA, NPS, and cooperating agencies agreed that the long-term restoration objective is to not necessarily maintain the freshwater wetland by artificial means (e.g., future shoreline protection structures) but rather, given its location at the shoreline, to allow the wetland elements and functions to adjust to sea level rise and future changes to freshwater inflow and precipitation.

The FHWA will, in cooperation with the NPS, use the latter agency's *Point Reyes National Seashore Road Rehabilitation Project Planting Plan* (2015) to revegetate SFDB corridor areas, including wetland habitat that will be affected by construction of the roadway improvement project. The wetland revegetation work undertaken by the FHWA will adhere to the goals of the *Plan*, which are to maintain biodiversity by using locally sourced genetic stock, minimize impacts to native plant communities by restoring these communities where possible, maintain the

natural landscape, maintain slope stability and minimize soil erosion using native vegetation, and control noxious weeds though the salvage of topsoil and revegetation with native seed.

The project also includes implementation of best management practices specific to minimizing and avoiding impacts to wetland habitat. These practices include:

- Work in Schooner Creek, East Schooner Creek, and adjacent unnamed drainages shall be conducted only during no- to low-flow periods of the year (July 1 – October 15). Culvert repair and replacement in the remainder of the project corridor shall be completed during the dry season (April 15 – October 15).

- Degraded areas impacted from construction-related activity shall be replanted or reseeded with native plants from the watershed or nearby watershed under guidance from PRNS biologists. Shrubs, trees, and herbaceous perennials and annuals will be seeded and planted along riparian corridors where impacts and vegetation removal occur. FHWA shall prepare a restoration plan for the project in consultation with PRNS for appropriate seed mixes and plants. Revegetated areas shall be protected and cared for, including watering when needed, until restoration criteria have been met under USACE permits, the USFWS Biological Opinion, and/or NPDES standards. Revegetated areas shall be monitored in accordance with an approved restoration plan to ensure success criteria are met.

- Prior to any ground disturbance on the project site, wetland areas adjacent to the construction footprint shall be clearly delineated with orange-colored plastic construction fencing (environmentally sensitive area fencing), silt fencing, or solid barriers to prevent workers or equipment from inadvertently straying beyond the construction disturbance limits within the project area.

The project includes a draft wetland mitigation monitoring plan that will be finalized prior to advertisement of the project to obtain construction bids. The plan includes mitigation site work plans, ecological performance standards and success criteria, monitoring requirements, a long-term management plan, an adaptive management plan, and financial assurances for monitoring and maintenance. The FHWA is responsible for meeting the wetland mitigation success criteria. If monitoring indicates that the Drakes Beach and Home Ranch mitigation sites are not meeting the established success criteria, the FHWA will prepare an analysis of the cause or causes of failure and propose remedial actions. If the mitigation sites have not met the success criteria at the end of the five-year monitoring period, the FHWA will continue its monitoring obligations until the mitigation commitments have been met. Following success of the mitigation plan and certification by the U.S. Army Corps of Engineers that restoration is complete, the National Park Service will assume the long-term maintenance responsibilities.

The draft monitoring plan also states that in the event that the mitigation site or sites do not function in accordance with the measures contained in the mitigation plan, and if it does not appear that they will meet established success criteria, the reason for not meeting the criteria will be evaluated and corrected by the FHWA. If significant remedial measures are needed, the

FHWA will work with the Corps and other resource agencies to identify needed measures and develop an implementation plan.

To summarize, the SFDB improvement project will permanently affect 2.9 acres and temporarily affect 2.3 acres of sub-optimal habitat. The proposed wetland mitigation projects at Drakes Beach and Home Ranch will create significantly improved habitat values given their size and locations, and with improved ability to support wetland-dependent plant and animal species. In particular, the wetland creation project at Drakes Beach will partially restore a coastal wetland filled and paved over to create a parking lot in the mid-1960s. The widening of the Schooner Creek channel and restoration of a section of East Schooner Creek will markedly improve in-stream and riparian habitat values at these locations over existing conditions. The roadway improvements themselves will also significantly reduce ongoing damage to roadside wetlands by eliminating the need for vehicles to drive off the roadway to allow for two-way traffic, to avoid flooded segments of the road, and/or to avoid damaged sections of roadway. The Commission concludes that the proposed wetland restoration measures, along with provisions for monitoring and remediation, will adequately mitigate for the permanent and temporary effects to roadside wetland habitat from the SFDB improvement project.

Conclusion
As described above, the project is an allowable use under Section 30233(a)(4) of the Coastal Act, and it is the least environmentally damaging feasible alternative, but it will generate unavoidable permanent and temporary impacts to wetland habitats located immediately adjacent to the 12-mile-long SFDB corridor. However, these impacts will occur within the Seashore boundary, which is excluded from the federal coastal zone, will affect primarily wetlands found in roadside ditches or along roadway segments where riparian wetland habitat exists adjacent to the pavement, are minimized to the greatest extent practicable, and the project will include mitigation measures to minimize adverse effects and more than offset them with new wetland creation and enhancement. The Commission finds that the proposed project is therefore consistent with the wetland policy of the Coastal Act (Section 30233(a)).

E. WATER QUALITY

Coastal Act Section 30231 states:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Coastal Act Section 30232 states:

> *Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

As previously noted in Section III.A (Project Background), the proposed project is located on federal land. Nevertheless the Commission generally considers water quality effects on federal land to constitute a potential coastal zone resource effect, and in the proposed project all the waters on the site drain to the ocean. This section therefore examines project impacts to water quality, in recognition of their spillover effects, and undertakes the standard Section 30233(a) analysis of those impacts.

The 2015 *Environmental Assessment* describes the hydrology of the SFDB project corridor in the Seashore:

> *PRNS contains watersheds that drain into Drakes Estero, Abbott's Lagoon, Estero de Limantour, the Pacific Ocean, and parts of Bolinas Lagoon and Tomales Bay (MCDPW 2014). Surface hydrology within the study area is influenced by direct precipitation, headwater flows, backwater flooding, sheet flow, surface seepage due to a high water table, the presence of poorly drained soils, tidal fluctuation, and surface runoff from surrounding areas. Runoff from adjacent roadways also contributes to on-site hydrology.*

The 2015 *Environmental Assessment* and the 2018 *Supplemental Environmental Assessment* concluded that the proposed 5.5-acre increase in impervious surface from rehabilitation and sectional widening of SFDB (a 17 percent increase in the project area) could affect water quality within the study area by increasing the velocity and amount of storm water runoff. However, the 2015 *Environmental Assessment* states that because the Seashore contains ample impervious surface given its limited development, and because a coastal watershed assessment indicated impervious surface was a low stressor to sub-watersheds within the Seashore, the increase in impervious surface is expected to have minimal impacts to water quality within the study area watersheds.

The project would maintain or restore natural drainage patterns by repairing, replacing, and upsizing culverts where necessary. Removing excess sediment at the existing East Schooner Creek culvert and replacing it with an adequately sized box culvert is expected to restore a more natural stream flow regime in this area. Stabilizing the bank of East Schooner Creek is expected to halt on-going erosion and improve water quality by reducing the amount of sediment and siltation within and downstream of this section of the channel. Replacement of the two existing culverts at Schooner Creek with a 57-foot-long free-span bridge and increasing the channel width by 36 feet would also improve drainage, tidal dynamics, and water quality and contribute to restoring them to more natural conditions. Removal of two acres of the Drakes Beach parking lot will restore wetland habitat filled in the mid-1960s and will reduce by two acres the aforementioned 5.5-acre increase in impervious surface from SFDB improvements.

The 2015 *Environmental Assessment* states that construction activities, particularly work within Schooner Creek and East Schooner Creek and soil disturbance adjacent to SFDB, would temporarily increase storm water runoff and sedimentation into surface waters. However, construction work at these locations would only occur during the July 1 to October 15 low-flow time period, and work areas would be isolated from flowing water by the construction of temporary cofferdams or similar structures. Once work zones are isolated from flowing water and appropriate best management practices are in place, suspended sediment levels typically return to background levels. Prior to the start of construction, a 401 Water Quality Certification and a National Pollutant Discharge Elimination System (NPDES) permit would be obtained. As part of the NPDES permit, a Storm Water Pollution Prevention Plan (SWPPP) would be developed to reduce potential water quality impacts during construction. Implementation of avoidance, minimization, and mitigation measures in the SWPPP would ensure that any degradation of water quality would be temporary and less than significant, and that biological productivity and quality of coastal waters would be maintained for wildlife, aquatic species, and the protection of human health. In addition, post-construction storm water treatment, including bio-swales and bio-strips, are also incorporated into the project to treat runoff from additional impervious surface arising from roadway improvements.

The subject consistency determination, 2015 *Environmental Assessment*, 2018 *Supplemental Environmental Assessment*, and the 2018 *Joint Aquatic Resource Permit Application* all reference a comprehensive list of construction best management practices (BMPs) incorporated into the project to avoid and minimize potential adverse effects on water quality. These measures include, but are not limited to, spill avoidance and control measures and equipment, soil erosion control measures and equipment, compliance with the California Stormwater BMP Handbook, development of a Rain Event Action Plan to prevent pollutants or sediments from reaching waterways during a rain event, restoration and revegetation plans for disturbed areas, and fencing of environmentally sensitive areas to avoided inadvertent ground disturbance and sediment discharge into waterways and drainages.

Conclusion

With implementation of avoidance and minimization measures as discussed above, the FHWA concluded that temporary and permanent adverse impacts to water quality within and adjacent to the project area would be less than significant. The Commission agrees and also finds that the proposed project, including elements to reduce streambank erosion and thus improve water quality in Schooner and East Schooner Creeks (which converge and then empty into Drakes Estero which directly connects with the ocean waters of Drakes Bay), would not cause significant adverse water quality impacts to coastal waters. Therefore, the Commission finds that the proposed project is consistent with the water quality protection policies of the Coastal Act (Sections 30231 and 30232).

F. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30210 states:

> *In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and*

> *recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act Section 30213 states in part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.*

Coastal Act Section 30220 states:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Coastal Act Section 30221 states:

> *Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.*

Coastal Act Section 30223 states:

> *Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.*

SFDB is the primary access road to recreational areas within the Seashore (**Exhibit 1**). The deteriorating condition of the roadway, and continual flooding of segments of the roadway, causes SFDB to be closed or reduced to one lane of traffic periodically during the year at certain locations and with increasing frequency. Traffic delays will occur during construction along the roadway but one lane of traffic will remain open (with a maximum 30-minute delay). However no construction work will occur on weekends except in rare circumstances, with approval from the NPS, and with two weeks advanced notice from the FHWA prior to any proposed weekend work. The FHWA will also provide this notice to the Commission. The Drakes Beach parking lot will be reconfigured from 399 spaces to 314 spaces, a reduction of approximately 21 percent, in order to implement the wetland restoration project at this location. The FHWA and NPS report that parking demand at this location exceeds the existing number of spaces on fewer than ten days per year. The consistency determination states that:

> *During these heavy visitor use periods, the NPS operates its Winter Shuttle Bus System from Drakes Beach parking lot from the end of December through late March or early April on weekends and federal holidays. During peak whale watching season, which typically occurs five to six weekends per year, any overflow would be directed to South Beach parking lot. Visitors directed to the South Beach parking lot would be required to ride the shuttle to visit the Kenneth*

> *C. Patrick Visitor Center, Drakes Beach, or the Peter Behr Overlook Trail. Therefore, public access to the coastal resources at Drakes Beach would continue to be provided.*

During construction of the roadway bridge over Schooner Creek, passage through the existing twin culverts by kayakers will be prohibited due to the replacement of the culverts with the new free-span bridge. Kayaking would still be allowed up- and down-stream of the construction zone. Following construction, the increased channel width and vertical clearance beneath the bridge will provide improved and safer recreational boating at this location.

Rehabilitating SFDB with a new roadway surface, a consistent roadway width, improved sight distances, widened shoulders, and curve modifications would enhance safety for motorists and bicyclists traveling within the Seashore. While the proposed project would generate temporary short term inconveniences to public access and recreation during construction periods, these effects are unavoidable and more than offset by the project's overall long-term improvements to public access and recreation. Therefore, the Commission finds that the proposed SFDB roadway improvements and wetland restoration at Drakes Beach would not adversely affect public access and recreation, and that the project is consistent with the public access and recreation policies of the Coastal Act (Sections 30210, 30213, 30220, 30221, and 30223).

G. VISUAL RESOURCES

Coastal Act Section 30251 states:

> *The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation any by local government shall be subordinate to the character of its setting.*

The 2015 *Environmental Assessment* for the proposed project describes the visual landscape along the 12-mile-long project corridor:

> *The visual character of the northern portion of the study area consists of the densely vegetated steep hills and ravines of Inverness Ridge. The wooded hillsides include various pine trees and shrubs growing up to the edge of SFDB. The steep hills constrain views from the road to the foreground and middleground. Traveling south on SFDB, the area's visual character transitions to more open views of flatter rolling hills and the low-lying coastal salt marsh of Schooner Bay, with vegetation such as saltgrass and saltmarsh bulrush. The majority of the study area farther south is characterized by views of flatter areas and rolling hills covered with prairie grass and patches of shrubs stretching into the distance, with*

> *unobstructed views of the open sky and distant views of the Pacific Ocean and coastlines. This rural landscape includes views of large expanses of pastureland and sparsely scattered groups of farm and ranch buildings, including farmhouses and assorted outbuildings, pasture fencing, farm vehicles, and grazing livestock. Views of power poles, power lines, and wood and barbed wire fencing are common along SFDB throughout the study area.*

The consistency determination further states that:

> *. . . views to and along the ocean and scenic coastal areas would remain intact, and the alteration of natural land forms would be minimized and would be visually compatible with the character of surrounding areas. Modifications to SFDB would remain subordinate to the character of its setting, as described in Section 3.6.3.2 of the 2015 EA/IS. Although slightly widened, SFDB would be maintained as a two-lane roadway, and views would not be obstructed. Revegetated roadsides would not interfere with public views to and along the coast, and native plant material would be used to restore disturbed areas to existing conditions.*

The FHWA states in its consistency determination that visual quality effects would be primarily related to slightly enlarged cut slopes and vegetation removal along segments of SFDB, necessary in order to provide a consistent and safe 24-foot-wide roadway. All disturbed areas would be revegetated with native plants and restored to pre-construction conditions. The removal of a portion of the Drakes Beach parking lot and restoring two acres of the former wetland buried by construction of the parking lot in the mid-1960s would actually serve as an improvement to the natural and scenic landscape along the shoreline. Views to this area from offshore waters would be improved by the elimination of asphalt and restoration of wetland vegetation and water features. Therefore, the Commission finds that the proposed SFDB roadway improvements and wetland restoration at Drakes Beach would not adversely affect scenic visual resources of the coastal zone, and that the project is consistent with the visual resource protection policy of the Coastal Act (Section 30251).

H. CULTURAL RESOURCES

Coastal Act Section 30244 states:

> *Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.*

The consistency determination includes an examination of potential cultural resources within the project area and potential effects to those resources from the SFDB improvement project. Cultural resources surveys were completed for the project by Far Western Anthropological Research Group, Inc. and JRP Historical Consulting, LLC, in 2015 and 2017, respectively. The area of potential effect (APE) originally analyzed is the 60-foot-wide corridor following the SFDB centerline with expanded areas that include pull-outs, parking areas, and construction

easements. The APE was later expanded to include the Drakes Beach parking lot and the Home Ranch pond mitigation sites. The 2018 *Supplemental Environmental Assessment* for the project reported that:

> *A records search, field inventory, assessment of the potential for buried archaeological deposits, and an Extended Phase I subsurface survey was conducted for the expanded APE. The records search demonstrated that no previously recorded sites had been identified in the expanded APE. During the intensive archaeological pedestrian survey, only a single isolate – a historic-era partially collapsed livestock watering trough – was identified.*
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> . . .
>
> *With regard to archaeological resources, the Drakes Beach parking lot contains Holocene-era sediments that have a high potential of covering sites more than 600 years old. An Extended Phase I subsurface study was conducted at this location. No buried soils or materials consistent with human habitation were identified (Ruby and Murphy 2017.*

The FHWA has communicated with the Federated Indians of Graton Rancheria regarding the proposed project since 2013, as the project is located within the Tribe's ancestral territory. No substantive comments were received by the FHWA to date. The FHWA made a finding that the project would not adversely affect cultural resources, and the State Historic Preservation Officer (SHPO) concurred with this finding on September 15, 2015, and again on February 23, 2018 (for the project modifications at Drakes Beach and Home Ranch). The Commission staff mailed a letter to the Federated Indians of Graton Rancheria on October 5, 2018, stating that a consistency determination for the proposed project would be heard by the Commission at its November 2018 meeting, and requesting information on any Tribal cultural or historical sites within or adjacent to the project corridor. No response was received as of October 24, 2018.

Based on the cultural resource inventory and evaluation work undertaken by the FHWA within the project area, and the finding made by SHPO, the Commission agrees with the FHWA that the proposed project is designed to not adversely affect cultural resources and is therefore consistent with the cultural resource policy of the Coastal Act (Section 30244).

SUBSTANTIVE FILE DOCUMENTS

1. Consistency Determination CD-0003-18 (Federal Highway Administration, Sir Francis Drake Boulevard Improvement Project, Marin County, October 2018).
2. Sir Francis Drake Boulevard Improvement Project Environmental Assessment/Initial Study, Federal Highway Administration, August 2015.
3. Sir Francis Drake Boulevard Improvement Project Supplemental Environmental Assessment/Subsequent Initial Study, Federal Highway Administration, June 2018.
4. Joint Aquatic Resource Permit Application (with attachments), Federal Highway Administration, June 2018.
5. February 23, 2018, Concurrence Letter from State Historic Preservation Officer to Federal Highway Administration regarding Sir Francis Drake Boulevard Improvement Project, Marin County.
6. Negative Determination ND-0024-14 (National Park Service, Road Improvement and Maintenance Projects, Point Reyes National Seashore, Marin County)
7. October 5, 2018, Letter from Coastal Commission to Federated Indians of Grafton Rancheria regarding Sir Francis Drake Boulevard Improvement Project, Marin County.
8. *Bolsa Chica Land Trust et al., v. The Superior Court of San Diego County* (1999) 71 Cal.App.4th 493, 517.
9. Point Reyes National Seashore Road Rehabilitation Project Planting Plan, National Park Service, 2015.