

Appendix A

Public and Agency Participation

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Newspaper: Ventura County Star
Publication Dates: 10/30/ 2020, 10/31/202, 11/01/202

DEPARTMENT OF DEFENSE
DEPARTMENT OF THE NAVY

NOTICE OF AVAILABILITY
OF A DRAFT ENVIRONMENTAL ASSESSMENT FOR
HOME BASING OF THE MQ-25A STINGRAY CARRIER-BASED
UNMANNED AIR SYSTEM AT
NAVAL BASE VENTURA COUNTY POINT MUGU, CA

The Navy is proposing to home base a new carrier-based unmanned air system at Naval Base Ventura County in Point Mugu, California. This system is known as the MQ-25A Stingray. In support of national defense objectives, the Stingray will help to enhance the capability and versatility of the carrier air wing by providing persistent, sea-based, multi-mission aerial refueling and intelligence, surveillance, and reconnaissance.

In accordance with the National Environmental Policy Act, the Navy has prepared a draft environmental assessment to evaluate the potential environmental impacts of this home basing action. The environmental assessment analyzes the impacts of home basing 20 Stingray air systems and stationing approximately 730 additional personnel plus their family members at Point Mugu. In addition, the environmental assessment addresses the impacts of constructing a new hangar, training facilities, and supporting infrastructure; performing air vehicle maintenance; providing training for air vehicle operators and maintainers; and conducting approximately 960 annual MQ-25A Stingray flight operations.

Interested parties may view a copy of the draft environmental assessment at the Ray D. Prueter Library, 510 Park Avenue, Port Hueneme, CA, 93041 or the E.P Foster Library, 651 E. Main St, Ventura, CA, 93001, and at the following website:

<http://www.nepa.navy.mil/stingray>.

To ensure consideration in the final environmental assessment, all comments must be postmarked or received online no later than **November 30, 2020**. Written comments may be submitted online at <http://www.nepa.navy.mil/stingray> or mailed to: MQ-25A Stingray CBUAS EA Project Manager, Naval Facilities Engineering Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, VA 23508.

Newspaper: La Vida
Publication Date: 10/29/2020

DEPARTAMENTO DE DEFENSA
DEPARTAMENTO NAVAL DE LOS ESTADOS UNIDOS

NOTIFICACIÓN DE DISPONIBILIDAD
DEL BORRADOR DE LA EVALUACIÓN AMBIENTAL PARA EL
BASADO DEL SISTEMA AÉREO SIN TRIPULACIÓN PARA PORTAVIONES
MQ-25A STINGRAY EN
LA BASE NAVAL VENTURA COUNTY POINT MUGU, CA

El Departamento Naval está proponiendo emplazar un nuevo sistema aéreo sin tripulación para portaviones en la Base Naval Ventura County en Point Mugu, California. Este sistema se conoce como el MQ-25A Stingray (Mantarraya). En apoyo a los objetivos de defensa nacional, el Stingray ayudará a mejorar la capacidad y versatilidad del componente aéreo del portaviones ofreciendo durante múltiples misiones, mejor reabastecimiento aéreo, adquisición de inteligencia, vigilancia y reconocimiento, originados desde el mar y de manera consistente.

De acuerdo con la Ley de Política Nacional en Materia de Medio Ambiente (NEPA por sus siglas en inglés), el Departamento Naval ha preparado un borrador de evaluación ambiental para evaluar los potenciales impactos ambientales de la acción propuesta. La evaluación ambiental analiza los impactos de emplazar 20 sistemas aéreos Stingray y reubicar a aproximadamente 730 empleados adicionales más sus familiares en Point Mugu. Adicionalmente, la evaluación ambiental analiza los impactos de la construcción de un nuevo hangar, instalaciones de entrenamiento, e infraestructuras de apoyo; realizar el mantenimiento de los vehículos aéreos; entrenamiento para los operadores y personal de mantenimiento de los vehículos aéreos; y la realización de aproximadamente 960 operaciones de vuelo anuales del MQ-25A Stingray.

Personas y agencias interesadas pueden ver una copia del borrador de la evaluación ambiental en la biblioteca Ray D. Prueter, 510 Park Avenue, Port Hueneme, CA, 93041, o en la biblioteca E.P Foster, 651 E. Main St, Ventura, CA, 93001, y en la siguiente página de internet:

<http://www.nepa.navy.mil/stingray>.

Para asegurar que las consideraciones serán tomadas en cuenta en la evaluación ambiental final, todos los comentarios deben tener matasellos o recibirse electrónicamente a más tardar el **30 de noviembre de 2020**. Comentarios por escrito pueden enviarse electrónicamente a través de la página <http://www.nepa.navy.mil/stingray> o enviarse por correo a: MQ-25A Stingray CBUAS EA Project Manager, Naval Facilities Engineering Command Atlantic, Attn: Code EV21JB, 6506 Hampton Blvd, Norfolk, VA 23508.

Appendix B

Record of Non-Applicability and Air Quality Calculations

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**UNITED STATES NAVY
RECORD OF NON-APPLICABILITY FOR CLEAN AIR ACT CONFORMITY**

Introduction

This Proposed Action falls under the Record of Non-Applicability (RONA) category and is documented with this RONA. Federal regulations state that no department, agency, or instrumentality of the Federal Government shall engage in, support in any way or provide financial assistance for, license to permit, or approve any activity that does not conform to an applicable State Implementation Plan. It is the responsibility of the Federal agency to determine whether a Federal action conforms to the applicable State Implementation Plan before the action is taken (40 CFR section 93.150).

Federal actions are exempt from conformity determinations if their emissions do not exceed designated *de minimis* levels for criteria pollutants (40 CFR Part 93.153(c)). The general conformity rule also exempts certain federal actions from the requirements of the rule, as these actions are assumed to conform to a State Implementation Plan. Conformity *de minimis* levels (in tons/year) for Ventura County, which is located in the South Central Coast Air Basin (SCCAB), are listed in Table 1.

Table 1. Conformity De Minimis Levels for Criteria Pollutants in Ventura County

Criteria Pollutant	de minimis Level (tons/year)
Volatile Organic Compounds (VOCs)	50
Oxides of Nitrogen (NO _x)	50

Note: Ventura County is designated as serious nonattainment for the 2008 and 2015 federal 8-hour ozone standards.

Proposed Action

Activity: The Navy proposes to establish facilities and functions at Naval Base Ventura County (NBVC) Point Mugu, California to support West Coast home basing and operations of the MQ-25A Stingray Carrier-Based Unmanned Aircraft System (Stingray CBUAS). Under the Proposed Action, the Navy would home-base 20 Stingray CBUAS and conduct approximately 960 annual training and functional check flight operations, and station approximately 730 personnel and their families. Infrastructure requirements include the construction of a training facility (military construction project P-026), battery shop storage (addition to Building PM385), a hangar with a radio communications facility, two antenna towers, an aircraft parking apron, taxiways to the runway, and roadway construction and improvements in the immediate vicinity (P-025).

Location: NBVC Point Mugu, California

Proposed Action Name: Home Basing of the MQ-25A Stingray CBUAS at NBVC Point Mugu

Proposed Action Summary: The Proposed Action includes construction activities that are anticipated to occur starting in March 2023 through March 2025. Additionally, after construction is complete, MQ-25A aircraft would begin arriving for home basing and would ultimately total 20 aircraft. They would operate with up to 960 landing and take-off cycles at the airfield annually.

Air Emissions Summary: Based on the air quality analysis, the emissions from construction and the airfield operations would be well below conformity *de minimis* levels. Attachment (1) of this RONA presents the air emission documentation for the Proposed Action.

Affected Air Basin: SCCAB

Date RONA Prepared: September 7, 2020

RONA Prepared By: Lesley Hamilton, Cardno

Proposed Action Exemptions

The Proposed Action is exempt because the calculated total emissions are below *de minimis* levels set forth in the Clean Air Act General Conformity Regulation.

Attainment Status and Emissions Evaluation and Conclusion

The General Conformity Rule requires conformity evaluations for proposed emissions that would occur within areas that are in nonattainment or maintenance of a national ambient air quality standard. The project site is within Ventura County and is under the jurisdiction of the Ventura County Air Pollution Control District. Therefore, the focus of this conformity applicability analysis is to compare project emissions to *de minimis* levels applicable to Ventura County.

Ventura County is classified as in serious nonattainment for both the 2008 and the 2015 8-hour federal ozone standard. Ozone is a secondary pollutant formed when ozone precursors, nitrogen oxides (NO_x) and volatile organic compounds (VOCs) combine in the atmosphere in the presence of sunlight. Therefore, the United States Environmental Protection Agency general conformity regulations set *de minimis* levels for ozone precursors instead of ozone. Based upon these designations, the applicable annual conformity *de minimis* thresholds for Ventura County are 50 tons each of VOCs and NO_x.

Table 2 summarizes the conformity-related emissions that would occur from implementation of the Proposed Action within Ventura County. The main sources of conformity-related emissions associated with the project construction and airfield operations would include combustive emissions due to the use of fossil fuel-powered equipment and engines. The data show that conformity-related emissions for the Proposed Action would be well below the applicable *de minimis* levels and exempt from conformity under the Clean Air Act, as amended.

Table 2. Annual Conformity-Related Emissions from the Proposed Action

Activity	Air Pollutant Emissions (tons/year)	
	VOCs	NOx
Construction Emissions 2023	0.39	4.54
Construction Emissions 2024	0.43	3.62
Construction Emissions 2025	1.83	0.90
Annual CBUAS Operation and Commuter Emissions post-2025	0.49	9.82
Conformity <i>de minimis</i> Levels (tons/year)	50	50
Exceeds Conformity <i>de minimis</i> Levels?	No	No

RONA Approval

To the best of my knowledge, the information presented in this RONA is correct and accurate, and I concur in the finding that the Proposed Action does not require a formal Clean Air Act Conformity Determination.



Signature

10/8/20

Date

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Construction Inputs to CalEEMod

Raw Data Inputs for CALEEMOD		std dump truck cap =	12 CY	std asphalt thickness =	4 IN				
		std conc truck cap =	9 CY	standard gravel thickness =	6 IN				
		std foundation excavation =	2 FT	airfield gravel =	2 FT				
		airfield excavation =	3 FT	airfield concrete =	2 FT				
P-026 Training Facility - 2 storie	26,000	sf building	24 months			Total SF footprint		bldg sf	118,000
	13,000	sf footprint				1,169,871			
	42,900	sf asphalt demo						CY In	CY out
	963	cy excavation	80 trucks of dirt hauled out			Acreage		148,535	127,712
	642	cy concrete	71 concrete trucks			26.86			
	433	cy asphalt	36 trucks of asphalt						
	621	cy gravel	52 trucks of gravel hauled in			grading		125 lb/cf asphalt	
	300	ft trenching	65 Material Deliveries			388,753 SY		14300 cf asphalt	
	15,889	SY grading (2 passes)				40.2 AC		1,787,500 lb asphalt demo-ed	
								893.75 tons debris	
P-025 Hangar	90,000	sf	24 months						
	24,950	cy excavation	2,079 trucks of dirt hauled out			asphalt paving			
	13,526	cy concrete	1,503 concrete trucks			268,871 sf			
	2,160	cy asphalt	180 trucks of asphalt						
	3,241	cy gravel	270 trucks of gravel hauled in			Acreage			
	1,000	ft trenching	129 Material Deliveries			6.17			
	14,173	LF foundation pilings				Concrete paving			
P-025 POV parking						796,000			
	123,946	sf							
	9,181	cy excavation							
	2,160	cy asphalt							
	3,241	cy gravel							
P-025 Apron and taxiways	27,544	SY grading (2 passes)							
F St, Frontage Rd and other paved access	796,000	SF	24 months			18.27			
	88,444	CY excavation	7,370 trucks of dirt removed						
	58,963	CY concrete	6,551 concrete trucks						
	58,963	CY gravel	4,914 trucks of gravel hauled in						
	313,115	SY grading							
Battery addition									
F St, Frontage Rd and other paved access	144,925	SF	24 months						
	32,206	SY grading (2 passes)							
	4,026	CY excavation	335 trucks of dirt removed						
	1,789	CY asphalt	149 asphalt trucks						
	2,684	CY gravel	224 trucks of gravel hauled in						
Battery addition									
Battery addition	2000	SF							
	148	cy excavation	12 trucks of dirt removed						
	74	cy concrete	8 concrete trucks						
	37	cy gravel	6 trucks of gravel hauled in						

Stingray CBUAS Aircraft Emissions

Emissions from MQ-25A LTOs								
		Total pounds						
Operation	# Annual Ops	VOC	CO	Nox	SO2	PM10	PM2.5	CO2
LTO	960	927.36	11,942.40	5,145.60	217.62	28.80	28.80	1,858,560
		0.46	5.9712	2.57	0.11	0.01	0.01	929
		Total pounds						
Operation	Total aircraft	VOC	CO	Nox	SO2	PM10	PM2.5	CO2
Engine Maintenance Runups	20	1.61	4,046.80	14,340.80	26.90	67.80	67.80	4,596,200
	Total Tons	0.00	2.02	7.17	0.01	0.03	0.03	2,298
Grand Total Tons		0.46	7.99	9.74	0.12	0.05	0.05	3,227
							Metric tons CO2e	2,928

Commuter Emissions

Calendar Year: 2025												
Season: Annual												
Vehicle Classification: EMFAC2011 Categories												
Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW. Note 'day' in the unit is operation day.												
trips	Days/Yr	RT miles	TOG	CO	NOX	SOX	pounds per year					
440	245	15	48	2,379	144	7	PM10	PM2.5	CO2	CH4	N2O	CO2e
		Tons	0.02	1.19	0.07	0.00	0.00	0.00	756,045	8	15	760,648
												380.32
											Metric tons CO2e	345

CalEEMod Version: CalEEMod.2016.3.2

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Date: 9/9/2020 7:27 PM

Home Basing of the MQ-25A Stingray CBUAS at NBVC Point Mugu - Ventura County, Annual

Home Basing of the MQ-25A Stingray CBUAS at NBVC Point Mugu
Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	26.00	1000sqft	0.60	26,000.00	0
General Light Industry	90.00	1000sqft	2.07	90,000.00	0
Other Asphalt Surfaces	268.87	1000sqft	6.17	268,871.00	0
Other Non-Asphalt Surfaces	796.00	1000sqft	18.27	796,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8	Operational Year	2025		
Utility Company	Southern California Edison				

1.3 User Entered Comments & Non-Default

Project Characteristics -

Land Use -

Grading - Grading acreage based on data provided in P-025 1391 and Chapter 2 of the EA

Demolition -

Land Use Change -

Table Name	Column Name	Default Value	New Value
tblGrading	AcresOfGrading	112.50	40.20
tblGrading	MaterialExported	0.00	127,712.00
tblGrading	MaterialImported	0.00	148,535.00

2.0 Emissions Summary

2.1 Overall Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.3923	4.5422	3.5474	0.0156	0.8573	0.1083	0.9657	0.3141	0.1009	0.4149	0.0000	1,486.2111	1,486.2111	0.1838	0.0000	1,490.8059
2024	0.4290	3.6197	3.9371	0.0140	0.6900	0.0860	0.7760	0.1871	0.0809	0.2680	0.0000	1,296.7247	1,296.7247	0.1222	0.0000	1,299.7784
2025	1.8318	0.8986	1.1257	3.4700e-003	0.1609	0.0240	0.1849	0.0436	0.0225	0.0660	0.0000	319.1226	319.1226	0.0371	0.0000	320.0492
Maximum	1.8318	4.5422	3.9371	0.0156	0.8573	0.1083	0.9657	0.3141	0.1009	0.4149	0.0000	1,486.2111	1,486.2111	0.1838	0.0000	1,490.8059

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days	Num Days	Phase Description
1	Demolition	Demolition	3/1/2023	4/11/2023	5	30	
2	Site Preparation	Site Preparation	4/12/2023	5/9/2023	5	20	
3	Grading	Grading	5/10/2023	7/11/2023	5	45	
4	Building Construction	Building Construction	7/12/2023	3/18/2025	5	440	
5	Paving	Paving	3/19/2025	5/6/2025	5	35	
6	Architectural Coating	Architectural Coating	5/7/2025	6/24/2025	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 40.2

Acres of Paving: 24.44

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 174,000; Non-Residential Outdoor: 58,000; Striped Parking

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	88.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT
Site Preparation	7	18.00	0.00	18,567.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT
Building Construction	9	493.00	194.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT
Architectural Coating	1	99.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHT

3.2 Demolition - 2023

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.6800e-003	0.0000	9.6800e-003	1.4700e-003	0.0000	1.4700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0340	0.3223	0.2947	5.8000e-004		0.0150	0.0150		0.0139	0.0139	0.0000	50.9881	50.9881	0.0143	0.0000	51.3451
Total	0.0340	0.3223	0.2947	5.8000e-004	9.6800e-003	0.0150	0.0246	1.4700e-003	0.0139	0.0154	0.0000	50.9881	50.9881	0.0143	0.0000	51.3451

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	6.5800e-003	2.4400e-003	3.0000e-005	7.5000e-004	1.0000e-005	7.7000e-004	2.1000e-004	1.0000e-005	2.2000e-004	0.0000	3.0990	3.0990	2.9000e-004	0.0000	3.1062
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.1000e-004	4.7300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8300e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.3966	1.3966	3.0000e-005	0.0000	1.3974
Total	8.8000e-004	6.9900e-003	7.1700e-003	5.0000e-005	2.5600e-003	2.0000e-005	2.6000e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	4.4957	4.4957	3.2000e-004	0.0000	4.5036

3.3 Site Preparation - 2023

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2001	0.0000	0.2001	0.1023	0.0000	0.1023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2752	0.1824	3.8000e-004		0.0127	0.0127		0.0117	0.0117	0.0000	33.4507	33.4507	0.0108	0.0000	33.7212
Total	0.0266	0.2752	0.1824	3.8000e-004	0.2001	0.0127	0.2127	0.1023	0.0117	0.1139	0.0000	33.4507	33.4507	0.0108	0.0000	33.7212

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0408	1.3882	0.5141	6.5400e-003	0.1592	2.8500e-003	0.1620	0.0437	2.7200e-003	0.0464	0.0000	653.8572	653.8572	0.0603	0.0000	655.3657
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e-004	3.3000e-004	3.7800e-003	1.0000e-005	1.4500e-003	1.0000e-005	1.4600e-003	3.9000e-004	1.0000e-005	3.9000e-004	0.0000	1.1173	1.1173	2.0000e-005	0.0000	1.1179
Total	0.0413	1.3885	0.5179	6.5500e-003	0.1606	2.8600e-003	0.1635	0.0441	2.7300e-003	0.0468	0.0000	654.9745	654.9745	0.0604	0.0000	656.4836

3.4 Grading - 2023

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1568	0.0000	0.1568	0.0768	0.0000	0.0768	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0747	0.7766	0.6312	1.4000e-003		0.0321	0.0321		0.0295	0.0295	0.0000	122.7042	122.7042	0.0397	0.0000	123.6964
Total	0.0747	0.7766	0.6312	1.4000e-003	0.1568	0.0321	0.1889	0.0768	0.0295	0.1063	0.0000	122.7042	122.7042	0.0397	0.0000	123.6964

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3800e-003	8.2000e-004	9.4500e-003	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.9000e-004	0.0000	2.7933	2.7933	6.0000e-005	0.0000	2.7948
Total	1.3800e-003	8.2000e-004	9.4500e-003	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.9000e-004	0.0000	2.7933	2.7933	6.0000e-005	0.0000	2.7948

3.5 Building Construction - 2023

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0967	0.8847	0.9990	1.6600e-003		0.0430	0.0430		0.0405	0.0405	0.0000	142.5599	142.5599	0.0339	0.0000	143.4077
Total	0.0967	0.8847	0.9990	1.6600e-003		0.0430	0.0430		0.0405	0.0405	0.0000	142.5599	142.5599	0.0339	0.0000	143.4077

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0237	0.8318	0.2690	2.9200e-003	0.0795	1.0700e-003	0.0805	0.0229	1.0300e-003	0.0239	0.0000	286.0427	286.0427	0.0202	0.0000	286.5469
Worker	0.0929	0.0553	0.6367	2.0800e-003	0.2445	1.6400e-003	0.2461	0.0649	1.5100e-003	0.0665	0.0000	188.2021	188.2021	4.1800e-003	0.0000	188.3067
Total	0.1167	0.8871	0.9057	5.0000e-003	0.3239	2.7100e-003	0.3266	0.0879	2.5400e-003	0.0904	0.0000	474.2447	474.2447	0.0244	0.0000	474.8535

3.5 Building Construction - 2024

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179
Total	0.1928	1.7611	2.1179	3.5300e-003		0.0803	0.0803		0.0756	0.0756	0.0000	303.7223	303.7223	0.0718	0.0000	305.5179

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0489	1.7514	0.5581	6.1800e-003	0.1692	2.2400e-003	0.1715	0.0488	2.1400e-003	0.0510	0.0000	606.3015	606.3015	0.0422	0.0000	607.3566
Worker	0.1873	0.1071	1.2612	4.2700e-003	0.5207	3.4500e-003	0.5242	0.1383	3.1800e-003	0.1415	0.0000	386.7009	386.7009	8.1200e-003	0.0000	386.9040
Total	0.2362	1.8585	1.8192	0.0105	0.6900	5.6900e-003	0.6957	0.1871	5.3200e-003	0.1925	0.0000	993.0024	993.0024	0.0503	0.0000	994.2606

3.5 Building Construction - 2025

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0376	0.3429	0.4423	7.4000e-004		0.0145	0.0145		0.0137	0.0137	0.0000	63.7779	63.7779	0.0150	0.0000	64.1527
Total	0.0376	0.3429	0.4423	7.4000e-004		0.0145	0.0145		0.0137	0.0137	0.0000	63.7779	63.7779	0.0150	0.0000	64.1527

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.9200e-003	0.3619	0.1148	1.2900e-003	0.0355	4.6000e-004	0.0360	0.0103	4.4000e-004	0.0107	0.0000	126.4854	126.4854	8.7200e-003	0.0000	126.7033
Worker	0.0374	0.0205	0.2457	8.6000e-004	0.1093	7.1000e-004	0.1100	0.0290	6.6000e-004	0.0297	0.0000	77.8951	77.8951	1.5500e-003	0.0000	77.9339
Total	0.0473	0.3824	0.3604	2.1500e-003	0.1449	1.1700e-003	0.1460	0.0393	1.1000e-003	0.0404	0.0000	204.3805	204.3805	0.0103	0.0000	204.6373

3.6 Paving - 2025

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170
Paving	8.0800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0241	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	4.0000e-004	4.7600e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.5082	1.5082	3.0000e-005	0.0000	1.5090
Total	7.2000e-004	4.0000e-004	4.7600e-003	2.0000e-005	2.1200e-003	1.0000e-005	2.1300e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.5082	1.5082	3.0000e-005	0.0000	1.5090

3.7 Architectural Coating - 2025

Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.7143					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.9900e-003	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743
Total	1.7173	0.0201	0.0317	5.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	4.4682	4.4682	2.4000e-004	0.0000	4.4743

Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7700e-003	2.6200e-003	0.0314	1.1000e-004	0.0140	9.0000e-005	0.0141	3.7100e-003	8.0000e-005	3.7900e-003	0.0000	9.9541	9.9541	2.0000e-004	0.0000	9.9591
Total	4.7700e-003	2.6200e-003	0.0314	1.1000e-004	0.0140	9.0000e-005	0.0141	3.7100e-003	8.0000e-005	3.7900e-003	0.0000	9.9541	9.9541	2.0000e-004	0.0000	9.9591

Appendix C

Coastal Zone Management Act Documentation

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DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:

5090

Ser N0000CV/0693

October 7, 2020

Mr. Larry Simon
Manager, Federal Consistency Division
California Coastal Commission
455 Market Street, Suite 228
San Francisco, CA 94105-2219

Dear Mr. Simon:


SUBJECT: COASTAL CONSISTENCY NEGATIVE DETERMINATION FOR
HOMEBASING THE MQ-25 STINGRAY CARRIER BASED UNMANNED
AIR SYSTEM AT NAVAL BASE VENTURA COUNTY POINT MUGU CA

The U. S. Navy proposes to base the MQ-25 Stingray Carrier-Based Unmanned Air System at Naval Base Ventura County, Point Mugu. The proposed project would construct facilities and provide training, maintenance, and operations for the 20 MQ-25 Stingray aircraft that will be based on the west coast. Approximately 730 personnel and their families will be stationed at Point Mugu to support this home-basing.

This submittal is in compliance of section 930.35 of the National Oceanic and Atmospheric Administration Federal Consistency Regulations (15 CFR 930). The Navy has determined that the proposed action would have no effect to coastal resources for the reasons identified in its Coastal Consistency Negative Determination (enclosure (1)).

The Navy requests your concurrence on this proposed project. Please email a letter of concurrence to Ms. Deb McKay, Regional National Environmental Policy Act Coordinator at deborah.mckay@navy.mil. If you have any questions or need further information, please contact Ms. Deb McKay at (619) 532-2284.

Sincerely,


J. H. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosure: 1. Coastal Consistency Negative Determination



DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:

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The Navy requests your concurrence on this proposed project. Please email a letter of concurrence to Ms. Deb McKay, Regional National Environmental Policy Act Coordinator at deborah.mckay@navy.mil. If you have any questions or need further information, please contact Ms. Deb McKay at (619) 532-2284.

Sincerely,


J. H. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosure: 1. Coastal Consistency Negative Determination

**COASTAL CONSISTENCY NEGATIVE DETERMINATION
FOR THE
PROPOSED HOME BASING OF THE MQ-25A STINGRAY CARRIER-BASED UNMANNED AIR SYSTEM AT NAVAL
BASE VENTURA COUNTY, POINT MUGU, CALIFORNIA**

In accordance with the Federal Coastal Zone Management Act of 1972, as amended, Section 307(c)(1), the United States (U.S.) Department of the Navy (Navy) has determined that the Proposed Action, home basing of MQ-25A Stingray Carrier-based Unmanned Air System (CBUAS), at Naval Base Ventura County (NBVC) Point Mugu, California (Figure 1) would have no effect on the resources or uses of the coastal zone. Therefore, the Navy has concluded that a Coastal Consistency Determination is not required and submits this Coastal Consistency Negative Determination, consistent with California Coastal Management Program, as described in Chapter 3 of the California Coastal Act of 1976 (Cal. Pub. Resources Code § 30200 to 30265.5).

The Navy proposes to establish facilities and functions at NBVC Point Mugu, California to support West Coast home basing and operations of the Stingray CBUAS. Under the Proposed Action, the Navy would home base 20 Stingray CBUAS (Photo 1); construct a hangar, training facilities, and supporting infrastructure; perform air vehicle (AV) maintenance; provide training for AV operators and training facilities for maintainers; conduct approximately 960 Stingray CBUAS annual training and functional check flight operations; and station approximately 730 personnel, plus their family members.



Photo 1. Stingray CBUAS

Under the Proposed Action, the West Coast home basing of the Stingray CBUAS would require new facilities and infrastructure. In particular, the Stingray CBUAS would require:

- A new squadron hangar, radio communications facility, and two antenna towers; parking for AVs, government vehicles, and privately-owned vehicles; taxiways; and associated utilities and infrastructure.
- Training facilities for AV operators and training facilities for maintainers.

These major construction elements would be provided under proposed Military Construction projects P-025 (Hangar), Building PM385 addition (Battery Shop), and P-026 (Training facility). The project footprint for P-025 would be approximately 38.5 acres, and the exact location of the various project elements would be determined during project design. A notional hangar site plan is shown in Figure 2. The Building PM385 addition would be 2,000 square feet, and the project footprint for P-026 would be approximately 1.6 acres (Naval Facilities Engineering Command [NAVFAC], 2020). The proposed sites for Building PM385 (Battery Shop addition), P-026 (Training facility), and Special Project RM 19-1368 (Building PM508 Renovations) are shown in Figure 3. Hangar 365 would also be used for some Intermediate Maintenance events. However, no major renovations are anticipated for this hangar (Figure 3).

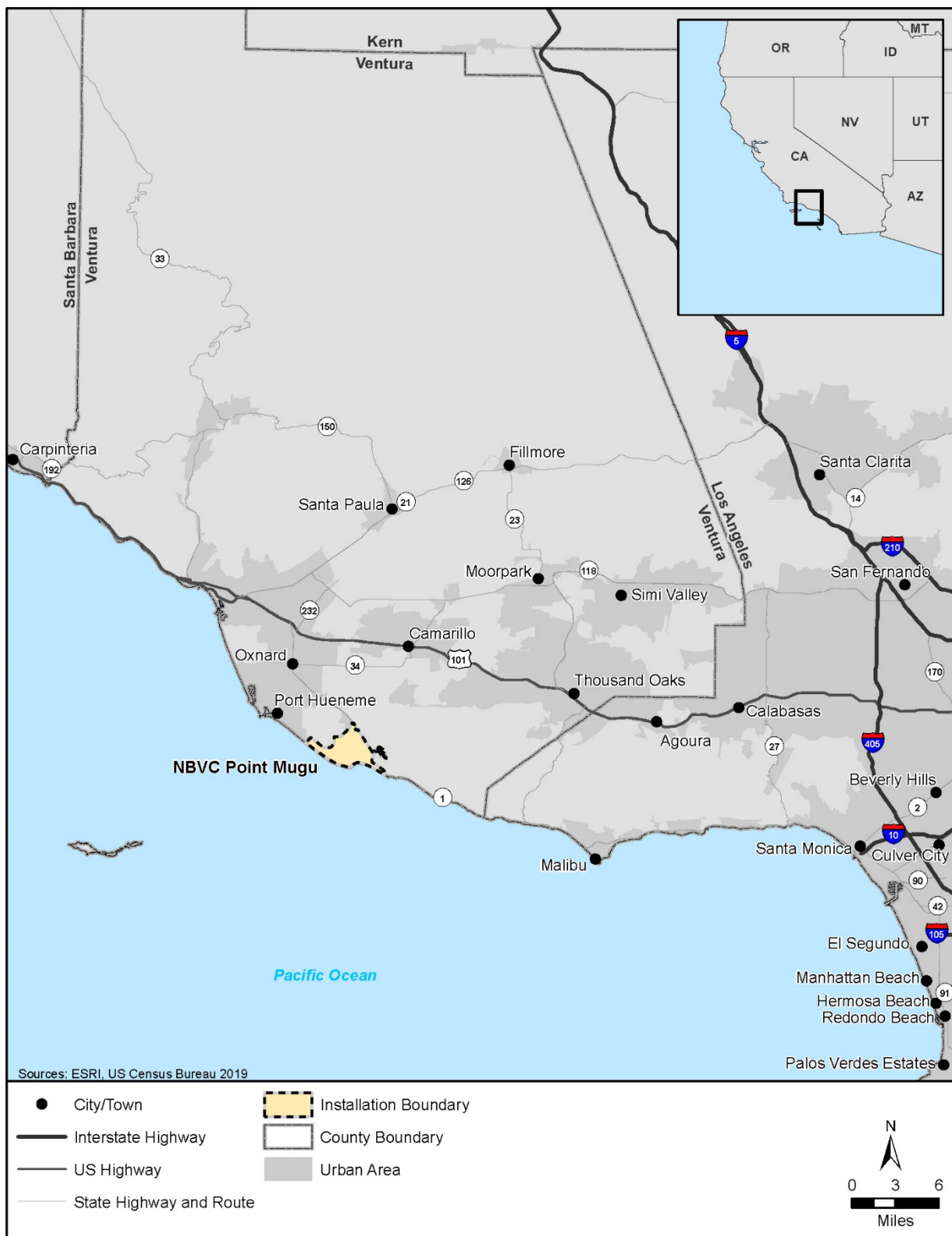


Figure 1. Location of NBVC Point Mugu

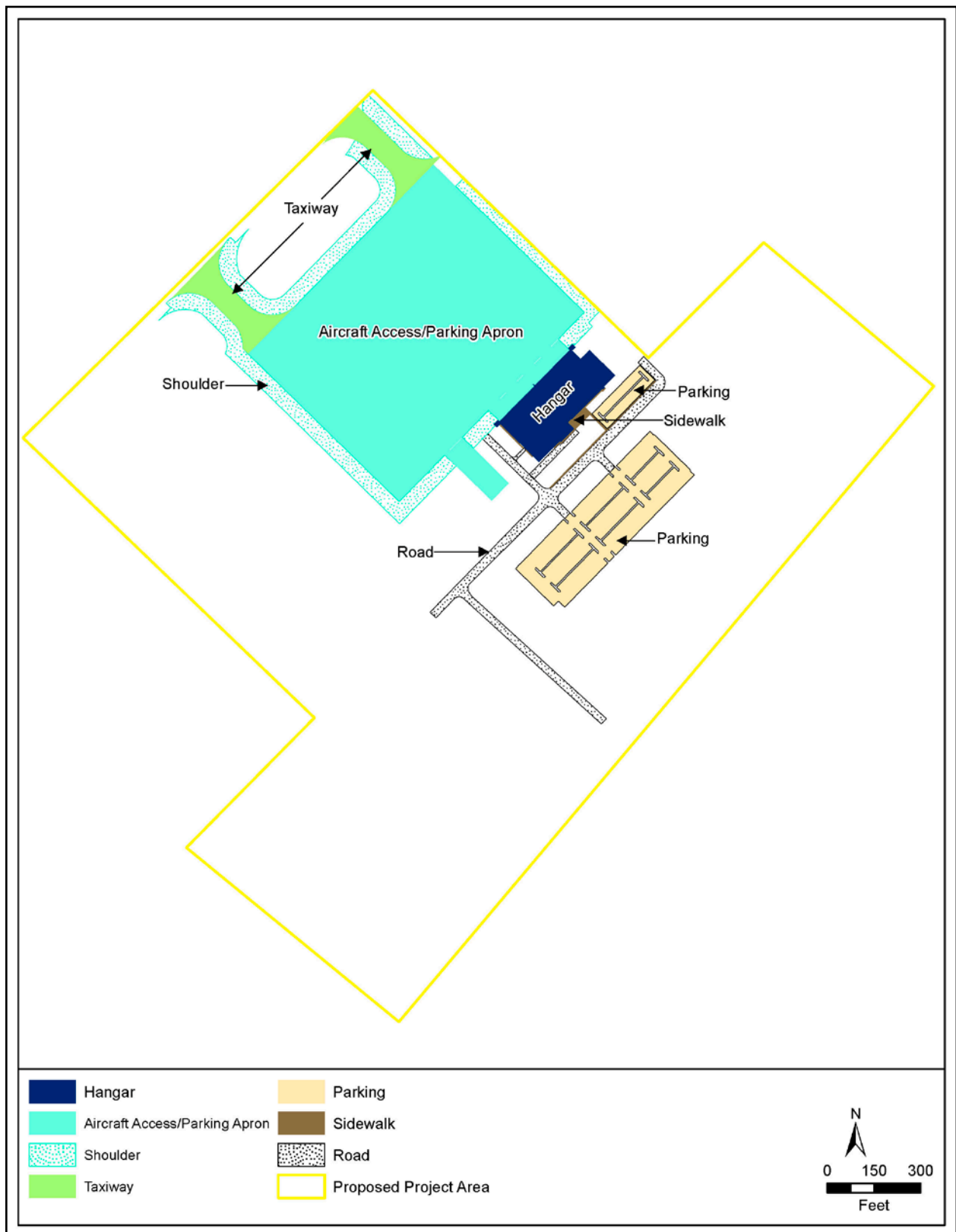


Figure 2. P-025 Notional Hangar Layout for the Stingray CBUAS



Figure 3. P-026 Proposed Stingray CBUAS Training Facility and other Key Buildings Project Area

LOCATION AND BACKGROUND

NBVC Point Mugu, situated on the coast of Ventura County, California, is composed of 4,500 acres of land, including support facilities and instrumentation infrastructure. The base is located 9 miles southeast of the City of Oxnard. The Proposed Action would occur within the boundaries of the military base, adjacent to the existing air operations such as runways, taxiways, aircraft parking aprons and aircraft hangars (Figure 4). NBVC Point Mugu provides real-time control of all air traffic within its coastal area, which permits dynamic reallocation of flight paths to ensure safe, secure, unhindered military operations. NBVC operates and maintains two runways – Runway 3/21 (11,000 feet long) and Runway 9/27 (5,500 feet long).

This submittal is similar to previously concurred with negative determinations for air operations facility expansion. In March 2013, the California Coastal Commission concurred with the Navy's Negative Determination for the West Coast Home Basing of the MQ-4C Triton Unmanned Aircraft System at NBVC Point Mugu, California (ND-015-13). On April 23, 2018, the Commission concurred with a negative determination (ND-0007-18) for the license, construction, and operation and a new U.S. Coast Guard (USCG) facility at NBVC Point Mugu. In both decisions, the Commission found that the proposed actions would not adversely affect coastal zone resources pursuant to the Coastal Zone Management Act. Close coordination and planning was involved with these projects and the Proposed Action to site all three hangars adjacent to each other for efficiency of shared infrastructure and to minimize impacts (Figure 5).

PROJECT OVERVIEW

The Stingray CBUAS is designed to enhance aircraft carrier capability and versatility for the Joint Forces Commander through integration of an effective, sustainable, and adaptable unmanned air system (UAS) into the carrier air wing (CVW). The Stingray CBUAS will be the Navy's first carrier-based unmanned aircraft to function primarily as a mission refueling AV extending the range and reach of the CVW. The Stingray CBUAS will also provide secondary recovery tanking (refueling close to the carrier), as well as intelligence, surveillance, and reconnaissance capabilities.

Prior to the arrival of the Stingray CBUAS into the fleet by fiscal year (FY) 2024, new facilities and associated infrastructure would be constructed under military construction projects P-025 and P-026 and special project RM 19-1368, to support Stingray CBUAS flight operations. In order to meet the requirements of the Stingray CBUAS, an increase in military personnel and contractors at NBVC Point Mugu would be necessary. The estimated construction period for these facilities would begin in March 2023 and continue through March 2025.

P-025

The primary function of the squadron hangar is to support maintenance, repair, inspection, servicing, and flight preparation. The high bay area in hangars allows for AV maintenance in a controlled environment. The hangar would also provide the necessary support spaces, including two ground control station control rooms, flight planning, briefing and debriefing, and communications equipment rooms. The hangar is planned based on a Type I hangar because the Stingray CBUAS is roughly the size of an F/A-18. The hangar, located along the flight-line, would be two-stories, 50 feet high and approximately 90,000 square feet and accommodate up to seven Stingray CBUAS. The hangar, aircraft apron (approximately 710,000 square feet of concrete), taxiways (approximately 43,000 square feet each), 1,000 sq ft radio communications facility, 16,000 sq ft antenna platform, personnel parking break shelter, and access roads would be built within the approximate 93-acre project area shown in Figure 2.



Figure 4. Proposed Project Locations within NBVC Point Mugu



Figure 5. Proposed Locations of Stingray CBUAS, Triton, and USCG Facilities

The overall project footprint would be approximately 38.5 acres (NAVFAC, 2020), and the exact location of the various project elements would be determined during project design. Two taxiway connections from the hangar to existing Taxiway B (each 75 feet wide) would be constructed over the drainage ditch on the north side of the apron via culverts. One of the two taxiways would be constructed by the Navy as part of this project, and the other taxiway would be constructed by the U.S. Coast Guard and used jointly by U.S. Coast Guard and the Navy. Each taxiway would be approximately 43,000 sq ft. Vehicular and pedestrian access to a 380-space personnel parking area would likely consist of two metal grated bridges over the drainage ditch located south of the proposed hangar site. A new access road to the hangar from 7th Street would be designed to avoid the adjacent drainage ditch. Access to 7th Street would be via a metal grated bridge across the drainage ditch. 7th Street would be realigned, and the existing bridge would be removed. The stormwater management system would include pervious pavement for parking and walkways and subsurface detention chambers to prevent ponding (NAVFAC, 2020). This project also includes the construction of a radio communications facility (including two, 95-foot antenna towers) at the hangar site. The proposed hangar site was previously developed as a base golf course in 1964 (U.S. Department of the Navy, 2013b). The notional design would be adapted to allow for the future integration of the Navy Triton and USCG hangars in the North Airfield area, which are currently in the design phase. The design would also protect existing improvements and infrastructure to the maximum extent practical.

Building PM385 Battery Shop

An approximately 2,000 square foot addition to the existing aircraft battery shop on the installation is proposed for lithium-ion battery maintenance and storage (Figure 3).

P-026

The proposed Stingray CBUAS maintenance training facility would be two-stories and approximately 26,000 square feet. The facility would accommodate a throughput of approximately 270 students per year. The facility would include spaces for student classrooms, instructor work spaces, part task trainers, and administrative support. The training facility would be located on the corner of 13th Street and Photo Road across the street from Building PM508. The proposed project area is approximately 2.25 acres (Figure 3) and is currently a vacant and largely impervious surface.

Special Project RM 19-1368

Renovation is proposed for Building PM508 (Figure 3). RM 19-1368 renovations would support Stingray CBUAS AVO simulator training. Renovations include:

- repairs to interior walls and doors
- repairs to raised flooring
- repairs to mechanical, electrical, and lighting systems
- repairs to communications and security systems
- seismic upgrades

Hangar 365

This existing hangar would be used for some Intermediate Maintenance events (Figure 3). Additionally, Fleet Replacement Squadron (FRS) VUQ-10 would operate out of Hangar 365. However, no major renovations are anticipated for this hangar.

Personnel Changes

The Proposed Action requires military, civilian, and contractor personnel to perform Stingray CBUAS operational, maintenance, and training functions. Approximately 730 military and civilian personnel would be stationed at NBVC Point Mugu to support Stingray CBUAS squadrons. Personnel would be added in phases over 3 to 5 years.

It is estimated that personnel associated with the Proposed Action would be accompanied by an average of about 1.2 family members. This planning factor is applied based on a U.S. Department of Defense (DoD) demographic survey and profile of the military community (DoD, 2018). Active duty members include both married and single members, and family members include spouses, children, and adult dependents. Personnel and family members would locate to NBVC Point Mugu and the surrounding areas of Ventura County, California.

Air Operations

Stingray CBUAS flight operations would be conducted in existing controlled airspace at NBVC Point Mugu. The addition of 960 annual Stingray CBUAS operations at NBVC Point Mugu would result in an average of approximately four additional operations per operating day (two take-offs and two landings), which equates to a 2.4 percent increase at the airfield. The Navy would obtain the appropriate authorizations before Stingray CBUAS operations would be conducted.

EVALUATION OF POTENTIAL EFFECTS ON COASTAL USES OR RESOURCES

As defined in Section 304 of the Coastal Zone Management Act, the term "coastal zone" does not include "lands the use of which is by law subject solely to the discretion of or which is held in trust by the Federal Government." NBVC Point Mugu is owned and operated by the Navy and, therefore, is excluded from the coastal zone. The Navy recognizes that federal actions on land excluded from the coastal zone may affect off-base uses and resources within the coastal zone. Accordingly, the Navy analyzed the impacts of the proposed project on the coastal zone by looking at reasonably foreseeable, direct and indirect effects on the coastal uses or resources. Also analyzed were the relevant management program enforceable policies.

Article 2: Public Access

The proposed project would occur within the boundaries of NBVC Point Mugu where access is controlled and restricted to military and USCG personnel, DoD and Department of Transportation employees and DoD retirees, authorized contractors, and official visitors. Public access to the proposed project area is prohibited because it is inconsistent with ensuring public safety and military security requirements. Surrounding land uses adjacent to the proposed project areas are designated for aircraft operations. The proposed project would be compatible with existing adjacent land uses and no changes would occur to public access of the coastal zone. Therefore, there would be no effect to public access.

Article 3: Recreation

There would be no change to existing publicly accessible areas surrounding NBVC Point Mugu as a result of the Proposed Action. The Proposed Action would not affect access to any public beaches located outside the installation boundaries both up-coast and down-coast from NBVC Point Mugu. The water areas immediately adjacent to the proposed project area are within established military and air operations security zones and are not considered water-oriented or coastal recreational activity areas. The Proposed Action would have no effect to coastal water-oriented recreational activity as none exists in the Proposed Action area.

Article 4: Marine Environment

The Proposed Action's project location is in the northern portion of NBVC Point Mugu and is not adjacent to the Pacific Ocean, Mugu Lagoon, or any relevant shoreline. The project location is far enough away from the shoreline that impacts from sea level rise are not expected. Marine mammals do not occur in the proposed project areas and the proposed project areas are located outside the boundaries of Essential Fish Habitat and Habitat Areas of Particular Concern.

The project site is to the east of an existing runway in an area that is disturbed and was previously a golf course. Construction of two taxiways crossing a drainage ditch via a culvert would impact between approximately 0.93 and 1.40 acres of jurisdictional wetland on the base (Figure 6). Because these wetlands are located on federally owned lands, impacts to these wetlands would have no effect on the coastal zone. However, these wetlands are hydrologically connected to Mugu Lagoon, which is part of the Laguna Point to Latigo Point Area of Special Biological Significance. As part of the Proposed Action, the Navy would maintain the hydrologic connections between Mugu Lagoon and upstream wetlands on and off-base during construction and as a permanent feature through the use of culverts for taxiway construction. Therefore, the Proposed Action would have no effect on biological productivity or water quality of downstream or upstream wetlands in the coastal zone, including Mugu Lagoon. Consultation with the U.S. Army Corps of Engineers and California Regional Water Quality Control Board would occur, as appropriate, to obtain the

necessary permits (i.e., Sections 404 and 401 of the Clean Water Act) prior to implementation of the Proposed Action.

Impacts to wetlands from construction of the access to 7th Street and the 380-space personnel parking area would be avoided by the incorporation of three metal grated bridges over the Oxnard Drainage Ditch No. 2A, and the access road to the hangar from 7th Street would be designed to avoid any impacts to Oxnard Drainage Ditch No. 2A.

The construction of the hangar, parking apron, taxiway, vehicle parking lots and roads under P-025 would result in a 35.6 acre increase in impervious surfaces. The Building PM385 site is currently paved and the addition for a battery shop would not impact wetlands or increase impervious surface. P-026 would not impact wetlands but would increase impervious surfaces by an additional 0.6 acres (Figure 7). Impervious surface areas have been minimized to the extent feasible through low impact development (LID) measures such as permeable pavement and grated bridge decks. Additional LID measures for stormwater and non-point source pollution control, such as biofiltration swales and subsurface detention chambers would also be used, as appropriate, to reduce runoff and ensure predevelopment hydrology is maintained to the maximum extent feasible (NAVFAC, 2020). LID runoff reduction features would be designed and located to provide on-site stormwater retention and trap eroded soils and, to the maximum extent technically feasible, infiltrate, filter, store, evaporate, and/or retain runoff close to its source. All potentially polluting substances (hazardous materials, hazardous wastes, oil and grease, household trash, etc.) would be managed in accordance with applicable regulations and instructions during construction and operations. Impacts to surface waters from stormwater runoff from construction and operations would be mitigated through implementation of a construction National Pollutant Discharge Elimination System permit; a construction Stormwater Pollution Prevention Plan; Erosion Control Plans and the use of catch devices and sheeting. All aircraft washing activities would occur at an existing designated wash rack and no facilities that would potentially affect groundwater quality (e.g., underground fuel storage tanks or septic systems) would be constructed or used. Therefore, no discharges of pollutants into surface waters or groundwater are expected during construction or operations and there would be no effect on biological productivity, water quality, or the marine environment.

The proposed project would have no effects on marine wildlife or habitat in the coastal zone. Marine wildlife populations in the vicinity of NBVC Point Mugu are already exposed to elevated noise associated with aircraft overflights and military industrial and training operations. The ambient noise levels within the vicinity are elevated under existing conditions and would not substantially increase from construction and operations. There would be no change to existing noise contours. The proposed project would have no impacts to coastal waters or commercial or recreational fisheries in the coastal zone.

The project location associated with the construction of the new hangar building and associated utilities and infrastructure occurs within the 100-year flood plain of Calleguas Creek. The proposed project includes measures for flood proofing and flood protection. Flooding threats would also be minimized by implementation of best management practices (BMPs) and the NBVC Point Mugu Integrated Natural Resources Management Plan (INRMP) (NBVC Point Mugu, 2019). The Proposed Action would be consistent with regulations for EO 11988, *Floodplain Management*. As a result, the proposed project would have no effect on flooding in the coastal zone.

Therefore, the proposed project would have no effect on biological productivity, water quality, or the marine environment of the coastal zone.

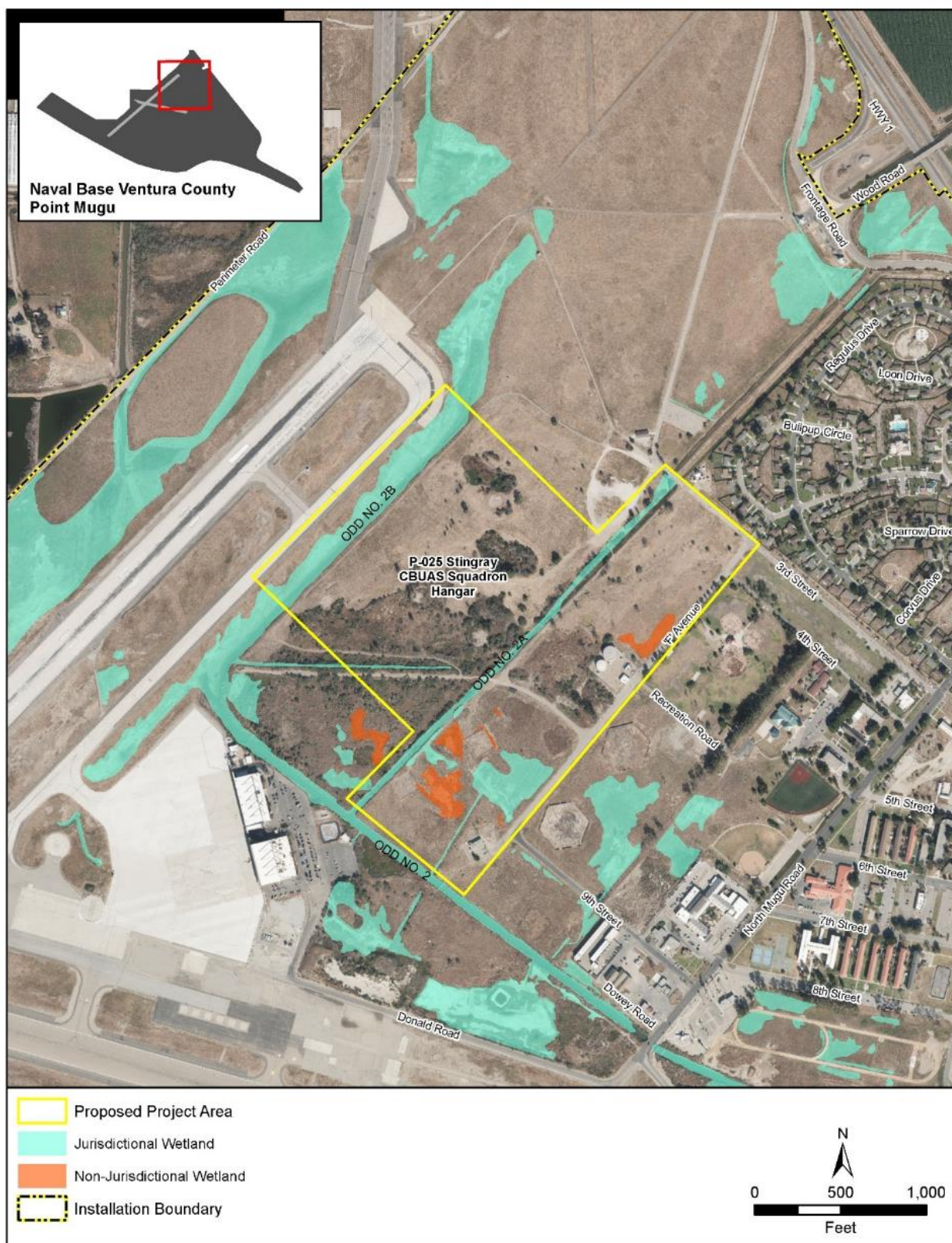


Figure 6. Wetlands Occurring in the Stingray CBUAS P-025 Project Area

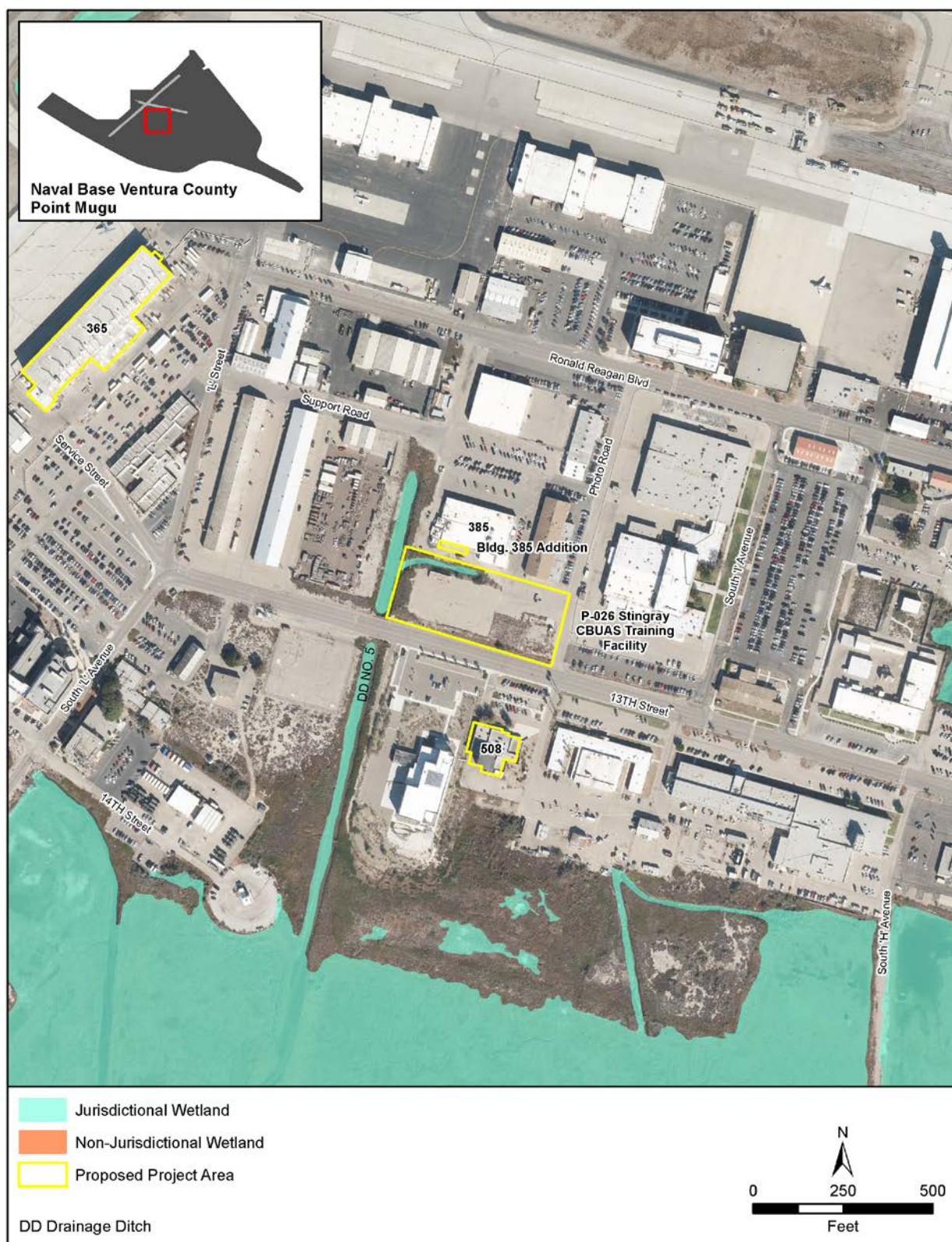


Figure 7. Wetlands Occurring in the Stingray CBUAS P-026 Project Area

Article 5: Land Resources

The project area does not contain, nor would it affect, any agricultural land, agricultural soils, or timberlands and is not located on or adjacent to any environmentally sensitive habitat areas, parks, or recreation areas.

Previous cultural resource investigations determined that no prehistoric or historical cultural resources or historic properties are present within the proposed project area (U.S. Department of the Navy, 2013a). The Proposed Action would not impact any known traditional cultural properties, and thus no tribal consultation is anticipated. If tribal resources are discovered, the Navy would coordinate and consult with federally recognized tribes in compliance with Executive Order 13175. Therefore, the proposed project would have no effect on cultural resources in the coastal zone.

Construction of the P-025 squadron hangar, radio communications facility, antenna towers, aircraft apron, taxiways, personnel parking, and access roads would permanently impact up to 38.5 acres of grassland, wetland, and disturbed/developed habitat within the 93-acre P-025 project area. Grassland habitats are largely dominated by nonnative invasive species and the habitat type is common in the undeveloped portions of the base. This impact would represent a loss of less than 1.6 percent of the total undeveloped habitat at NBVC Point Mugu. No off-base impacts to vegetation would occur as a result of the Proposed Action. Therefore, the Proposed Action would have no effect on vegetation in the coastal zone.

The NBVC Point Mugu INRMP identifies all federally listed species on NBVC Point Mugu and their known locations and habitats (NBVC Point Mugu, 2019). Federally listed species known to occur at NBVC Point Mugu include the following: California least tern (*Sterna antillarum browni*), least Bell's vireo (*Vireo bellii pusillus*), light-footed Ridgway's rail (*Rallus longirostris levipes*), western snowy plover (*Charadrius nivosus nivosus*), tidewater goby (*Eucyclogobius newberryi*), and salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum*) (NBVC Point Mugu, 2019; NBVC Point Mugu, 2020). Based on the recent surveys and the NBVC INRMP, the only federally listed species known to occur at NBVC Point Mugu at the project site is the least Bell's vireo. The Navy has initiated informal consultation with the USFWS, as required by Section 7 of the Endangered Species Act.

As the P-026, Building PM508, Building PM385, and Hangar 365 sites are already developed and largely or entirely impervious surface, no habitat for listed species exists at those sites. Thus, there would be no effect on threatened or endangered species associated with construction or building renovation at the P-026, Building PM508, Building PM385, and Hangar 365 sites.

The proposed P-025 hangar site was previously developed as a base golf course in 1964 and currently contains habitat classified as California Annual and Perennial Grassland with intermixed Western Semi-Desert/Mediterranean Alkali-Saline Wetlands, largely consisting of grasslands, wetlands/salt pannes, disturbed and developed areas, and drainage ditches. Based on the habitat present in the proposed project area, the 2019 NBVC Point Mugu INRMP (NBVC Point Mugu, 2019), and the 2019 Listed Species and Biological Opinion Comprehensive Monitoring Report to USFWS (NBVC Point Mugu, 2020), the only federally listed species that is present in the P-025 project area is the least Bell's vireo. The Proposed Action would have no effect on other federally listed species that occur on NBVC Point Mugu. Other species are not known to be present within the proposed project area, and as discussed below, airfield operations and noise outside the proposed project area would be similar to existing conditions.

The federally endangered least Bell's vireo has been recorded sporadically in low numbers in various willow (*Salix* spp.) and mulefat (*Baccharis salicifolia*) patches and other upland habitat sites at NBVC Point Mugu since 2009. Between 2016 and 2018, up to four pairs were believed to have bred on NBVC Point Mugu. In addition, surveys conducted in 2019 and 2020 observed three breeding pairs of least Bell's vireo within or

near the project area. Two of the pairs were observed in sites dominated by non-native species such as myoporum (*Myoporum laetum*) and other non-native annual plant species, as well as coyote brush (*Baccharis pilularis*) (NBVC Point Mugu, 2020). As most natural areas at NBVC Point Mugu are dominated by salt marsh, there is little suitable least Bell's vireo habitat to support more than a few nesting pairs per year (NBVC Point Mugu, 2019). Surveys occur at NBVC annually for least Bell's vireo and will continue, including weekly surveys when nesting activity is observed (including habitat adjacent to the future P-025 site).

Construction of the P-025 hangar would permanently or temporarily impact up to 38.5 acres of grassland, wetland, and disturbed/developed habitat and would displace wildlife present within the project footprint and vicinity. This would represent a loss of less than 1.2 percent of the total undeveloped habitat at NBVC Point Mugu. The habitat types that would be affected are disturbed scrub and non-native grass habitats on NBVC Point Mugu, with similar habitats occurring in the immediate vicinity of the project area. Also, consistent with the NBVC INRMP stated management objectives, NBVC Point Mugu continues to restore habitat on base for a variety of sensitive species, including least Bell's vireo. Therefore it is likely additional and higher quality habitat would be available in the future for vireos to supplement any loss of this marginal habitat lost from development within the old golf course.

Pre-construction preparation of the project site (e.g., grading, filling) would require vegetation removal. Given that two to three breeding pairs have been detected in the proposed project area in recent years, removal of this potential (low-quality) nesting habitat could impact least Bell's vireo that may return to the site to breed. To avoid this, vegetation removal would take place outside of the nesting season (March through September); thus, no least Bell's vireo nests or individuals would be directly impacted by vegetation clearing. With the vegetation in the proposed project area removed, breeding pairs that return may likely relocate in other habitats nearby. Given that the habitat in the proposed project area is sub-optimal and other areas of similar or better quality habitat exist elsewhere on base and in the surrounding area, birds would likely relocate with no adverse effect on least Bell's vireo future productivity. Upon completion of construction activities, temporarily impacted areas would be restored per the standards and measures outlined in the INRMP (NBVC Point Mugu, 2019).

If least Bell's vireos return and breed near the proposed project site, they could be exposed to construction-related noise. Noise associated with construction activities could affect birds in multiple ways, including altered vocal behavior to mitigate masking, reduced abundance in noisy habitats, changes in vigilance and foraging behavior, and impacts on individual fitness (Shannon, 2016). However, bird and other wildlife populations at NBVC Point Mugu are already exposed to elevated noise associated with aircraft noise and military industrial and training operations. As a result, indirect impacts from construction noise are expected to be minimal because the ambient noise levels within the vicinity are elevated under existing conditions and would be unlikely to substantially increase given the relatively minor and temporary nature of the proposed construction activities. Least Bell's vireos have also been documented at NBVC and other sites nesting successfully in areas with human disturbance, being able to tolerate more disturbance than previously suspected. At NBVC Point Mugu, a pair has had a territory and successfully nested directly adjacent to a parking lot with frequent human and vehicle activity, including regular commercial 18-wheeler truck activity.

Impacts to least Bell's vireos on other parts of base from Stingray CBUAS flight operations are expected to be insignificant. Stingray CBUAS flight operations would represent only a 2.4 percent increase in total annual airfield operations at NBVC Point Mugu. The increase in operations would be within the typical fluctuations in aircraft operations at military airfields from one year to the next. Bird/Animal Aircraft Strike Hazard (BASH) would continue to be managed in accordance with the base's BASH Management Plan, and NBVC Point

Mugu is expected to receive special project funding to reduce ponding in and around the runway environment further reducing BASH incidents in the coastal zone.

Based on noise modeling using NOISEMAP software to calculate aircraft noise levels of the Proposed Action, projected noise with Stingray CBUAS flight operations would be similar (less than 0.1 decibel increase in community noise equivalent level) to existing aircraft operations at NBVC Point Mugu, and there would be no change to the existing noise contours. The Stingray CBUAS would be quieter than six of the aircraft currently operating at NBVC Point Mugu. Bird populations at NBVC Point Mugu are already exposed to elevated noise associated with aircraft overflights. Therefore, given the minimal increase in flight operations, noise levels similar to existing aircraft operations, and relatively low presence of the species at NBVC Point Mugu, effects to least Bell's vireo from Stingray CBUAS flight operations would be negligible. All impacts would occur within the boundary of NBVC Point Mugu and would have no off-base impacts on populations of least Bell's vireo. Therefore, the Proposed Action would have no effect on least Bell's vireo in the coastal zone.

Although not federally listed, the western pond turtle (*Actinemys marmorata*) is currently under review for listing by the USFWS. Western pond turtles nest and burrow/hibernate in the project area and occur in the drainage ditches throughout the project area. In addition, the project area occurs in the only known nesting and wintering site at NBVC Point Mugu for western pond turtles. Construction would be coordinated with the NBVC Point Mugu Environmental Division to ensure measures are in place to avoid impacts to western pond turtles. If feasible, construction of culverts would occur during times of year when turtles are least likely to be affected. The use of BMPs and stormwater controls would ensure the Proposed Action would have no off-base impacts on turtle habitat. Therefore, the Proposed Action would have no effect on western pond turtles in the coastal zone.

The Proposed Action would have no effect on land resources in the coastal zone.

Article 6: Development

The proposed project would be sited adjacent to an existing airfield in a previously developed area and is consistent with adjacent land uses and would have no effect on coastal resources.

Viewshed

The proposed project would not affect views of the coastal zone available to the public and would be consistent with the industrial visual aesthetic of existing aircraft operation areas. Construction activities would be visible to military and government personnel working nearby. However, construction activities would be short-term and would occur in a developed area that is accessible only to military and USCG personnel, DoD and Department of Transportation employees and DoD retirees, authorized contractors, and official visitors. After construction, the project area would be visually consistent with aircraft operation infrastructure in adjacent areas. Therefore, there would be no effect to coastal zone aesthetics or the viewshed off the federal base.

Public Safety

There would be no impacts to public health and safety outside of the base as a result of the proposed project. Construction would take place entirely within the secured perimeter of NBVC Point Mugu, and construction areas would not be accessible by the public.

The flight operations for the Stingray CBUAS would be conducted in existing controlled airspace and flight lines at NBVC Point Mugu. There would be no change in the existing accident potential zones. The proposed

flight paths for the Stingray CBUAS pass entirely over undeveloped or agricultural areas, minimizing the population at risk from mishaps. To further minimize the potential for mishaps, Stingray CBUAS pilots receive extensive training prior to controlling actual aircraft flights. This includes extensive practice of emergency procedures to minimize the potential for UAS mishaps. The Stingray CBUAS is also designed with multiple, redundant safety systems to minimize the risk of mishaps. Therefore, the proposed project would have no effects on public health and safety in the coastal zone.

Public Works Facilities

The Port Hueneme Water Agency maintains adequate water supply to meet the needs of its users, including NBVC Point Mugu. In addition, the installation would plan for and assess infrastructure and utilities to ensure that the current system can adequately accommodate the specific water supply needs of each facility to be constructed under the Proposed Action. Based on water use projections identified in Port Hueneme Water Agency's Urban Water Management Plan (Port Hueneme Water Agency, 2016), there is adequate water supply through the year 2035 to serve its customers, and thus, no new water supply would be needed. Therefore, the Proposed Action would have no effects on potable water in the coastal zone.

All wastewater generated by NBVC Point Mugu is discharged to the City of Oxnard sanitary sewer system where it is conveyed to the Oxnard Regional Wastewater Treatment Plant for treatment and discharge (NAVFAC, 2016). The Navy discharges approximately 500,000 gallons or less of wastewater per day (Cooper, 2020). In general, there is excess capacity of utilities at the installation because the existing utilities were originally designed to support a larger population (U.S. Department of the Navy, 2013b). The Oxnard Regional Wastewater Treatment Plant has a nominal average day dry weather flow of 20 million gallons per day with a design capacity of 31.7 million gallons per day (City of Oxnard, 2017). Therefore, the existing wastewater systems have sufficient capacities to support the Proposed Action, and the Proposed Action would have no effects on wastewater in the coastal zone.

Noise Impacts

The nearest off-base noise sensitive locations are several residences west of the base boundary and 1,600 feet from the project site. Construction noise from the Proposed Action would be temporary and intermittent over a two year period, and to the extent feasible, would be performed during daytime hours. Noise levels in the off-base residential area would vary from a maximum A-weighted sound level (L_{max}) of 40 to 65 decibels due to construction equipment activity. Existing L_{max} in the off-base noise sensitive receptor area is not known, but considering that Runway 3/21 sits between the project site and the off-base noise sensitive receptors, and that those areas are currently exposed to Community Noise Equivalent Level of 65 to 70 decibels (and L_{max} from aircraft that is far greater than construction), construction for the Proposed Action would have no effects on ambient noise levels of the coastal zone.

The additional 960 aircraft operations that would be generated by the Stingray CBUAS would equate to a 2.4 percent increase from existing conditions. The additional operations would be within the typical fluctuations in aircraft operations at military airfields from one year to the next. The increase in noise from the Proposed Action would be expected to be less than 0.1 dB Community Noise Equivalent Level and there would be no changes to the existing noise contours with Stingray CBUAS operations. Therefore, implementation of the Proposed Action would have no effect on the noise environment of the coastal zone.

Air Quality

Estimated annual emissions from flight operations and personnel commuting indicate that all emissions would be minimal and would not exceed *de minimis* thresholds for General Conformity for either

construction or airfield operations. The proposed project would conform to the State Implementation Plan and would not trigger a General Conformity Determination under the Clean Air Act, as amended.

As a result, the Proposed Action would have no effects on air quality in the coastal zone or on a coastal use or resource.

Traffic

During the construction period, there would be a short-term increase in trucks and construction worker vehicles traveling to and from NBVC Point Mugu. It is estimated that there would be an average of 25 truck trips per workday (Monday through Friday) over a construction period of 24 months. Trucks would access the sites from State Route 1 and Las Posas Road entering the base at the Las Posas Road Gate. A portion of the construction workers would be expected to carpool; however, an average of 360 construction worker trips (180 in the morning and 180 in the afternoon) could be added to the daily weekday commuter trips to and from NBVC Point Mugu over the 24-month construction period. The additional traffic would be temporary, and minor compared with existing daily vehicle trips on Ventura County and NBVC Point Mugu roadways, and the roadway traffic levels of service would not be expected to change. Therefore, the temporary and minor increase in construction vehicles with implementation of the Proposed Action would have no effect on coastal uses or resources.

It is assumed that of the additional 730 operational personnel that would be added to the base population at NBVC Point Mugu under the Proposed Action, a portion of these would commute to the base daily. Accounting for approximately 40 percent of personnel that would be expected to be deployed, on leave, temporary assigned duty, reporting to off-base locations, or using alternative transportation (e.g., bicycle, carpool), the number of new daily commuters that would be expected to travel in personal vehicles to NBVC Point Mugu on an average day is estimated to be 440. Assuming two trips per day (one in the a.m. and one in the p.m.) for each of the 440 commuters, the estimated additional traffic on an average day resulting from the Proposed Action would be approximately 880 average daily trips. This additional traffic would represent an approximately 7 percent increase in the annual average daily traffic on State Route 1 (approximately 12,000 in 2017) traveling to the NBVC Point Mugu Gate. This small increase, along with the dispersed nature of routes to the gates, would not be expected to demonstrably degrade roadway levels of service. Therefore, the Proposed Action would have no effect on coastal uses or resources.

Article 7: Industrial Development

Does not apply to the Proposed Action.

CONCLUSION

In accordance with the Federal Coastal Zone Management Act of 1972, as amended, Section 307 (c)(1), this Coastal Consistency Negative Determination demonstrates that the Proposed Action would be undertaken in a manner that would not affect coastal uses or resources.

The Navy respectfully requests your concurrence. If you need additional information, or if you have any questions, please do not hesitate to contact Deborah McKay at 619-532-2284 or Deborah.McKay@navy.mil.

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Appendix D

Wetland Delineation Verification Report

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Wetland Delineation Verification Report
for
Home Basing of the MQ-25A Stingray Carrier-based Unmanned Air
System
at
Naval Base Ventura County, Point Mugu, California

September 2020



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ACRONYMS AND ABBREVIATIONS

CBUAS	Carrier-based Unmanned Air System	NWPR	Navigable Waters Protection Rule
CWA	Clean Water Act	U.S.	United States
GIS	geographic information system	USACE	U.S. Army Corps of Engineers
NBVC	Naval Base Ventura County	USEPA	U.S. Environmental Protection Agency

**WETLAND DELINEATION VERIFICATION REPORT
FOR
HOME BASING OF THE MQ-25A STINGRAY CARRIER-BASED UNMANNED AIR SYSTEM AT
NAVAL BASE VENTURA COUNTY, POINT MUGU, CALIFORNIA**

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1 INTRODUCTION

This Wetland Delineation Verification Report summarizes the results of a site visit on May 18, 2020, to assess the status of previously delineated wetlands and other waters of the United States (U.S.) within portions of Naval Base Ventura County (NBVC) Point Mugu, California (Figure 1). This report has been completed in support of a Proposed Action for the establishment of facilities and functions at NBVC Point Mugu to support West Coast home basing and operations of the MQ-25A Stingray Carrier-based Unmanned Air System (CBUAS).

The U.S. Army Corps of Engineers (USACE) previously completed wetland delineations within the project area(s) of the Proposed Action in 2016, the results of which are contained in NBVC Point Mugu's geographic information system (GIS) database (NBVC Point Mugu 2020). The purpose of the 2020 wetland verification site visit was to document and confirm the accuracy of the 2016 delineations and to reassess the jurisdictional status of wetlands and other waters of the U.S. consistent with the new Navigable Waters Protection Rule (NWPR) (U.S. Environmental Protection Agency [USEPA] and USACE 2020) (refer to Section 3.1).

The Proposed Action could necessitate work within, or otherwise affecting, Clean Water Act (CWA) Section 404 waters of the U.S. This report will support an ongoing National Environmental Policy Act Environmental Assessment of the project, as well as any potential CWA Section 401/404 permitting that may be required.

2 OVERVIEW

The Proposed Action would be implemented at NBVC Point Mugu, California, along the Pacific coast of California (Figure 1). NBVC Point Mugu covers an approximately 4,490-acre area and operates an airfield with two runways and a 36,000-square-mile sea test range extending more than 180 nautical miles seaward from shore. NBVC Point Mugu is located between the City of Oxnard to the northwest and the Point Mugu State Park to the southeast. The site is fronted by approximately 6 miles of shoreline and was initially established in the early 1940s as a place to stage, train, and supply the newly created U.S. Navy Construction Battalion (known as the Seabees).

The purpose of the Proposed Action is to base a new West Coast squadron designed to enhance aircraft carrier capability and versatility for the Joint Forces Commander through the integration of a persistent, sea-based, multi-mission aerial refueling and intelligence, surveillance, and reconnaissance unmanned aircraft system into the Carrier Air Wing. The need for the Proposed Action is to extend the range and reach of the Carrier Air Wing on the West Coast to meet and pace current and future threats with secondary recovery tanking and intelligence, surveillance, and reconnaissance capabilities in support of national defense objectives and policies.

Under the Proposed Action, the Navy would home base 20 Stingray CBUAS; construct a new squadron hangar, parking for AVs, government vehicles, and privately-owned vehicles, taxiways; utilities and supporting infrastructure; training facilities for AV operators; and training facilities for maintainers. These construction elements are included as proposed Military Construction projects P-025 (Hangar and Building PM385 Battery Shop addition), P-026 (Training facility), and Special Project RM 19-1368 (Building PM508 Renovations). Under the Proposed Action, the Navy would conduct approximately 960 Stingray CBUAS annual training flight operations, and station approximately 730 personnel, plus their family members.

Wetland delineation verification surveys were conducted in a project survey area (Figure 2) that includes portions of the Proposed Action containing or adjacent to wetlands. The Proposed Action includes two other NBVC locations (Building 508 and Hangar 365), but these locations do not contain any wetlands and are not near any wetlands, and therefore, were excluded from the survey area shown on Figure 2.



Figure 1. NBVC Point Mugu Location Map



Figure 2. Overview of Project Survey Areas

3 REGULATORY BACKGROUND

3.1 Section 404 of the Clean Water Act

Under Section 404 of the CWA, USACE has jurisdiction over waters of the U.S. and has the authority to issue permits for the discharge of dredged or fill material into waters of the U.S. On April 21, 2020, USEPA and USACE published the final NWPR to define “waters of the U.S.” and thereby redefine the scope of waters subject to federal regulation under the CWA (USEPA and USACE 2020). The NWPR streamlines the definition of waters of the U.S., includes four simple categories of jurisdictional waters, provides clear exclusions for many water features that traditionally have not been regulated, and defines terms in the regulatory text that have never been defined before (USEPA and USACE 2020). Congress, in the CWA, explicitly directed the agencies to protect “navigable waters.” The NWPR regulates these waters and the core tributary systems that provide perennial or intermittent flow into them.

Under the final NWPR, four clear categories of waters are federally regulated:

- territorial seas and traditional navigable waters
- perennial and intermittent tributaries to those waters
- certain lakes, ponds, and impoundments
- wetlands adjacent to jurisdictional waters

The final rule also details 12 categories of exclusions, features that are not “waters of the U.S.,” such as features that only contain water in direct response to rainfall (e.g., ephemeral features); groundwater; many ditches; prior converted cropland; and waste treatment systems (USEPA and USACE 2020).

The final rule clarifies key elements related to the scope of federal CWA jurisdiction, including:

- Providing clarity and consistency by removing the proposed separate categories for jurisdictional ditches and impoundments.
- Refining the proposed definition of “typical year,” which provides important regional and temporal flexibility and ensures jurisdiction is being accurately determined in times that are too wet and not too dry.
- Defining “adjacent wetlands” as wetlands that are meaningfully connected to other jurisdictional waters, for example, by directly abutting or having regular surface water communication with jurisdictional waters (USEPA and USACE 2020).

The NWPR was published on April 21, 2020. The final rule came into effect on June 22, 2020.

3.2 Section 401 of the Clean Water Act

Section 401 of the CWA requires that any person or agency applying for a federal permit or license for any activity, which may result in a discharge to a water body, must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Further, no license or permit may be issued if certification has been denied. Most Section 401 certifications are issued in connection with USACE CWA Section 404 permits for dredge and fill discharges.

4 METHODS

4.1 Aquatic Habitat Classification

Aquatic habitats in the project survey area are classified according to the Cowardin et al. (1979) classification system (Cowardin system). This classification system is used to hierarchically define wetland and deepwater habitat types by system, subsystem, class, and subclass for the purposes of inventory, evaluation, and management. The Cowardin system applies to all aquatic habitats less than 6.6 feet (2.0 meters) deep, including unvegetated water bodies, as wetlands. Although the CWA does not consider naturally unvegetated areas to be wetlands except in problematic and/or atypical situations (USACE 1987), the Cowardin system is the most widely used classification system for wetlands and other waters of the U.S., and it provides the federal standard for wetland classification adopted by the Federal Geographic Data Committee (2009). The Cowardin system can be applied to both jurisdictional and non-jurisdictional aquatic habitats.

4.2 Wetland Verification Procedures

Wetland delineation verification within the project survey area was conducted by Cardno biologists, Clint Scheuerman and Ryan Blaich, and NBVC Point Mugu Natural Resources Manager, Valerie Vartanian, during a site visit on May 18, 2020. Wetlands within the project survey area were previously mapped and classified in 2016 by the USACE, the results of which have been integrated into the NBVC Point Mugu GIS database (NBVC Point Mugu 2020). The project survey area was inspected via vehicle and walking reconnaissance survey so as to assess the current status of wetland boundaries, potential changes to jurisdictional status following changes to the CWA that became effective on June 22, 2020 (refer to Section 3.1), and any wetlands that had not previously been mapped.

Aquatic habitat boundaries were verified based on local topographic relief, plant community composition, and wetland hydrology indicators, all per the standards of the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008). The likely jurisdictional status of each wetland and other water was assessed based on local site conditions (e.g., surface water connectivity, shared hydrology with adjacent waters, etc.), and definitions provided in the NWPR (USEPA and USACE 2020). All wetlands contained in the NBVC Point Mugu GIS database (NBVC Point Mugu 2020) were previously considered jurisdictional under the CWA based on past rulings, definitions, and legal interpretations. The results in this report discuss the jurisdictional status of wetlands based on the new definitions provided in the final NWPR, effective June 22, 2020.

RESULTS
The site visit conducted on May 18, 2020, confirmed that the wetlands and other aquatic habitats in the project survey area that were mapped in 2016 and are currently in the NBVC Point Mugu GIS database (NBVC Point Mugu 2020), are accurate based on shape, location, and evident wetland indicators. A total of 12.88 acres of wetlands and other aquatic habitats occur in the project survey area (Figures 3 and 4; Table 1).

During the site visit conducted on May 18, 2020, and per the NWPR (USEPA and USACE 2020), a number of wetlands were deemed to no longer have jurisdictional status under the CWA due to a lack of adjacency to a jurisdictional water and/or having no regular surface water connection to jurisdictional waters. Figures 3 and 4 provide the results of the 2020 wetland delineation verification site visit, namely the wetlands that should no longer be considered jurisdictional based on the NWPR. Table 1 provides

the acreage of previously delineated wetlands and the status and acreage of wetlands per the 2020 NWPR within the project survey area.

Table 1. Wetlands Occurring in the Stingray CBUAS Project Survey Area

<i>Wetlands in Survey Area</i>	<i>Acres</i>
Jurisdictional per 2016 Delineation	12.88
Jurisdictional per 2020 Verification and NWPR	10.63
Non-Jurisdictional per 2020 Verification and NWPR	2.25

Wetlands in the project survey area are primarily salt marshes with tidal influence and/or palustrine emergent wetlands dominated by halophytic plant species. They are primarily dominated by coastal salt marsh plant species, such as pickleweed (*Salicornia pacifica*), salt grass (*Distichlis spicata*), alkali heath (*Frankenia salina*), and alkali weed (*Cressa truxillensis*). All jurisdictional wetlands in the project survey area are directly connected to or have surface water communication with Calleguas Creek, which flows into Mugu Lagoon and the Pacific Ocean.

Representative wetlands in the project survey area are presented in Photos 1-8, and descriptions of wetlands occurring in the photos are provided below. The location and direction of each photograph are depicted on Figures 3 and 4. Photos that were taken outside of the project survey area are included to provide perspective on the jurisdictional status of the wetlands encompassed by the project area. All photos are representative of wetlands that are located within the project survey area. In total, 10.63 acres of jurisdictional wetlands and 2.25 acres of non-jurisdictional wetlands were verified within the project survey area, based on the new definitions provided in the final NWPR.

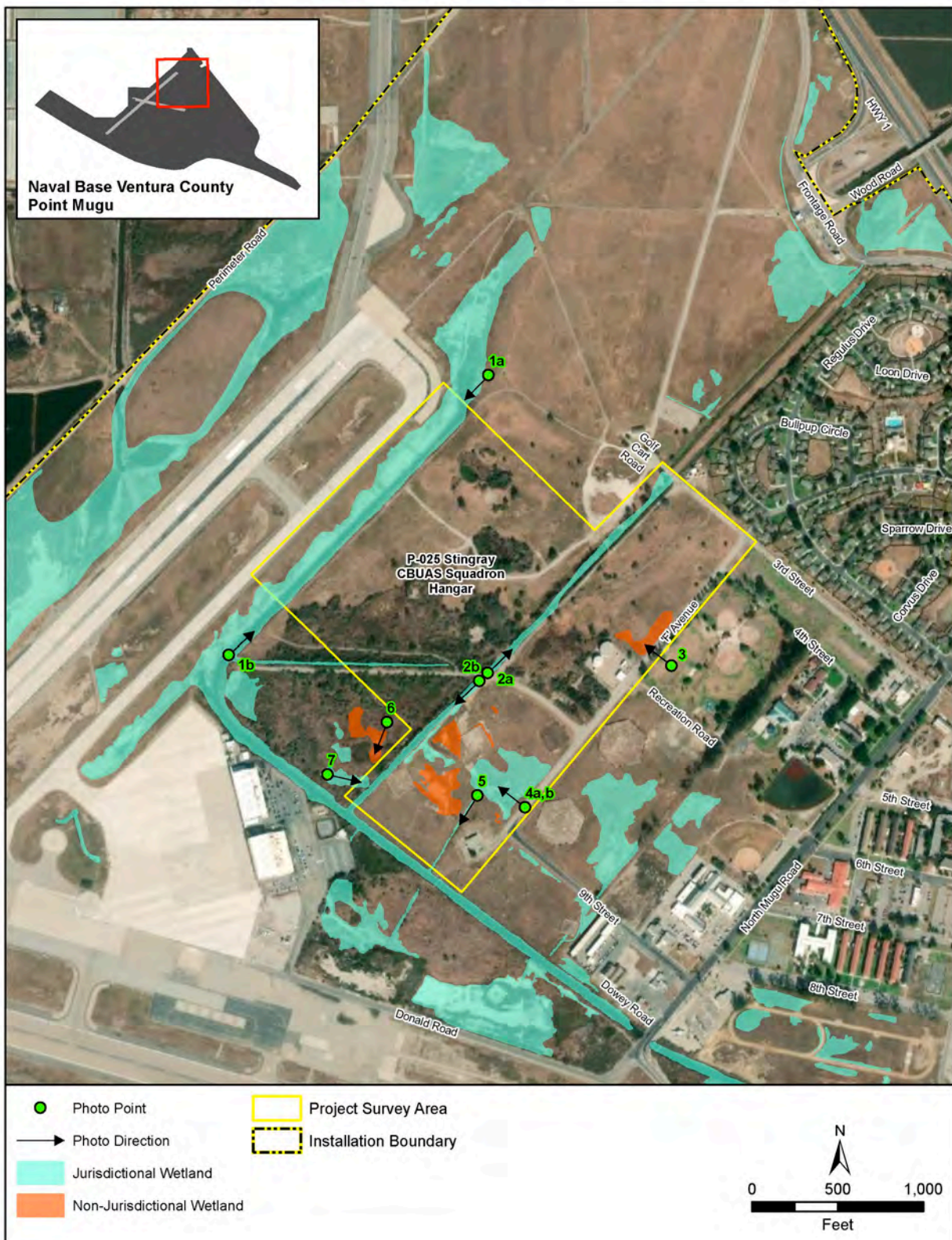


Figure 3. Project Survey Area and Wetland Verification Results



Figure 4. Project Survey Area and Wetland Verification Results (Cont'd)

Photos 1a and 1b

Photos 1a and 1b depict a tidally influenced, channelized riverine feature with adjacent palustrine wetlands dominated by emergent salt marsh species. Due to proximity to an airstrip, the vegetation within this area is regularly mowed to ensure a safe runway. Dominant plant species include pickleweed, alkali heath, salt grass, alkali weed, and yerba mansa (*Anemopsis californica*). Based on a clear and evident surface water connection to Calleguas Creek, this feature is considered jurisdictional under the NWPR.



Photo 1a.



Photo 1b.

Photos 2a and 2b

Photos 2a and 2b depict an excavated drainage ditch that channels flowing water into Calleguas Creek. The drainage is a riverine habitat that is seasonally flooded and bordered by palustrine wetlands that are dominated by emergent plant species. The dominant plant species are pickleweed, alkali heath, fat-hen (*Atriplex prostrata*) and salt grass. Based on a clear and evident surface water connection to Calleguas Creek, this feature is considered jurisdictional under the NWPR.



Photo 2a.



Photo 2b.

Photo 3

Photo 3 depicts an isolated, depressional wetland that is dominated by halophytic plant species. The depressional feature lacks any evidence of connectivity to a jurisdictional water. The dominant plant species are salt grass, alkali weed, and pickleweed. Even though these species are hydrophytes, they are also halophytes, which are species that are adapted to saline soils, which can explain their presence despite the lack of a continual surface water source. As this feature has no surface connectivity to jurisdictional waters, it should be considered non-jurisdictional under the NWPR.



Photo 3.

Photos 4a and 4b

Photo 4a displays surface soil cracks, a primary wetland hydrology indicator (USACE 2008), that occur within the larger wetland depicted in Photo 4b. Photo 4b depicts a salt panne wetland that shows evidence of seasonal inundation and is dominated by salt marsh species. The dominant plant species are alkali weed, pickleweed, salt grass, and rabbit's-foot grass (*Polypogon monspeliensis*). This wetland is connected to a small channelized wetland (Photo 5), which appears to allow for surface water communication with a large drainage ditch that connects to Calleguas Creek. Therefore, the wetland in Photo 4b should still be considered jurisdictional under the NWPR. However, a number of other wetlands in this general area are isolated, do not have surface water connectivity to jurisdictional waters, and would not be considered jurisdictional wetlands under the NWPR (Figure 3).



Photo 4a.



Photo 4b.

Photo 5

Photo 5 depicts a channelized wetland that is likely a remnant of an excavated ditch. The dominant plant species are alkali weed, pickleweed, salt grass, and rabbit's-foot grass. This small, channelized wetland connects to a large drainage ditch that flows into Calleguas Creek. Therefore, this wetland is considered jurisdictional under the NWPR.



Photo 5.

Photo 6

Photo 6 displays an isolated, depressional salt panne dominated by halophytic species. The salt panne lacks evidence of surface connectivity to a water source. The dominant plant species are alkali heath, alkali weed, and black mustard (*Brassica nigra*). Under the NWPR, because the wetland is isolated and lacks any evidence of surface water connection to a jurisdictional wetland, it should be considered non-jurisdictional.



Photo 6.

Photo 7

Photo 7 depicts a small depressional wetland that abuts a jurisdictional drainage (Photos 2a and 2b) and which during a flood event is likely inundated and contributes surface water flow into the drainage ditch, which then drains into Calleguas Creek. The dominant plant species are alkali heath, black mustard, and rabbit's-foot grass. This wetland is considered jurisdictional under the NWPR.



Photo 7.

Photo 8

Photo 8 depicts a wetland that has developed from a stormwater outfall that drains directly into a channelized estuarine wetland, and eventually Mugu Lagoon (Figure 4). The wetland is tidally influenced, and evidence of aquatic snail shells were obvious along the shoreline. The dominant plant species are pickleweed and ice plant (*Carpobrotus edulis*). This wetland is considered jurisdictional under the NWPR.



Photo 8.

5 DISCUSSION

Wetlands mapped by USACE in 2016 (NBVC Point Mugu 2020) were verified to be accurate based on shape, location, and evident wetland indicators during the wetland verification survey conducted on May 18, 2020. However, based upon the new definitions provided in the final NWPR (effective June 22, 2020) (USEPA and USACE 2020), certain wetlands in the Stingray CBUAS project survey area that were previously deemed to be jurisdictional, would no longer be considered jurisdictional under the NWPR (Figures 3 and 4; Table 1). The final NWPR defines “adjacent wetlands” as wetlands that are meaningfully connected to other jurisdictional waters, for example, by directly abutting or having regular surface water communication with jurisdictional waters (USEPA and USACE 2020).

Of the 12.88 acres of wetlands mapped in 2016 in the project survey area, 10.63 acres of those wetlands would still be considered jurisdictional under the NWPR, while 2.25 acres would be non-jurisdictional based upon the new definitions provided in the final NWPR (USEPA and USACE 2020). As explained above in the description of Photos 4a and 4b, a number of wetlands previously classified as jurisdictional by 2016 standards are isolated, do not have surface water connectivity to jurisdictional waters, and would not be considered jurisdictional wetlands under the NWPR.

Under the Proposed Action, any unavoidable impacts to waters of the U.S., as verified by USACE, would require CWA Section 401/404 permits.

6 REFERENCES

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7 LIST OF PREPARERS

Cardno prepared this Wetland Delineation Verification Report. Members of the professional staff include:

Cardno

Cristina Ailes, Charlottesville, VA

Wetland Verification Project Manager, 13 years' experience

Ryan Blaich, Solana Beach, CA

Junior Biologist, 2 years' experience

Clint Scheuerman, Santa Barbara, CA

Senior Biologist, 15 years' experience

Abigail Shoff, Harrisburg, PA

GIS Analyst, 9 years' experience

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Appendix E

Endangered Species Act Documentation

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DEPARTMENT OF THE NAVY
NAVAL BASE VENTURA COUNTY
311 MAIN ROAD, SUITE 1
POINT MUGU, CA 93042-5033

IN REPLY REFER TO:

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Ser N0000CV/0675

October 5, 2020

Mr. Steve Henry, Field Supervisor
Ventura Fish and Wildlife Office
U.S. Fish and Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

Dear Mr. Henry:

**SUBJECT: INFORMAL CONSULTATION FOR THE PROPOSED HOME BASING OF
THE MQ-25A STINGRAY CARRIER-BASED UNMANNED AIR SYSTEM AT
NAVAL BASE VENTURA COUNTY, POINT MUGU, CALIFORNIA**

The United States (U.S.) Navy is preparing a Draft Environmental Assessment for the proposed establishment of facilities and functions at Naval Base Ventura County (NBVC) Point Mugu, California (enclosure 1) to support west coast home basing and operations of the MQ-25A Stingray Carrier-based Unmanned Air System (CBUAS). The purpose of this letter is to request informal consultation under the Endangered Species Act regarding potential impacts of the proposed action on threatened and endangered species.

Project Description

The Proposed Action would home base 20 Stingray CBUAS; construct a new squadron hangar, a radio communications facility, two antenna towers, parking apron, taxiways to the runway, parking for government and privately-owned vehicles, training facilities, and supporting utilities and infrastructure; perform Air Vehicle (AV) maintenance; provide training for AV operators and maintainers; conduct approximately 960 Stingray CBUAS annual training and functional check flight operations; and station approximately 730 personnel, plus their family members, at NBVC Point Mugu. Personnel would be added in phases over three to five years. The Stingray will be the Navy's first CBUAS. It will serve primarily as a mission refueling AV, extending the range and reach of the carrier air wing.

The proposed action would include several construction and renovation projects. Project P-025 would consist of a new approximately 90,000 square foot hangar, 710,000 square foot concrete aircraft apron, taxiways, a 1,000 square foot radio communications facility, 16,000 square foot antenna platform and two 95-foot antenna towers, personnel parking, break shelter, and access roads constructed within a 93-acre project site at NBVC Point Mugu (enclosure 2). A 2,000 square foot addition to existing battery storage in building PM-385 would house lithium-ion battery maintenance and storage. Project P-026 would construct a new maintenance training facility on a 3.25-acre site that is currently a vacant and largely paved surface. Renovations would occur within existing building PM-508 and hangar 365 to provide a training school and intermediate maintenance facilities, respectively (enclosure 3). Construction and renovation would occur over approximately two years (March 2023 through March 2025). The overall

project footprint for the proposed P-025 hangar project would be approximately 38.5 acres and the exact location of the various project elements within the 93-acre project area would be determined during project design. A notional layout of the proposed hangar is shown in enclosure (4). Two taxiway connections from the hangar to existing Taxiway B (each 75 feet wide) would be constructed over a drainage ditch on the north side of the apron via culverts. One of the taxiways would be constructed by an adjacent U.S. Coast Guard project and used jointly with the Navy. Vehicular and pedestrian access to a 380-space personnel parking area would likely consist of two metal grated bridges over the drainage ditch located south of the proposed hangar site. A new access road to the hangar from 7th street would be designed to avoid the adjacent drainage ditch. Access to 7th street would be via a metal grated bridge across the drainage ditch, and 7th Street would be realigned and the existing bridge removed. The storm water management system would include pervious pavement for parking and walkways and subsurface detention chambers to prevent ponding.

The addition of 960 annual Stingray CBUAS flight operations at NBVC Point Mugu would result in an average of approximately four additional operations per operating day (two takeoffs and two landings), which equates to a 2.4 percent increase at the airfield. As unmanned air system offshore operations have been previously evaluated in the Point Mugu Sea Range Draft Environmental Impact Statement/Overseas Environmental Impact Statement, they are not evaluated as part of this proposed action.

Threatened and Endangered Species

The NBVC Point Mugu Integrated Natural Resource Management Plan (INRMP) identifies all federally listed species on NBVC Point Mugu and their known locations and habitats (NBVC Point Mugu, 2019). Federally listed species known to occur at NBVC Point Mugu include the following: California least tern (*Sterna antillarum browni*), least Bell's vireo (*Vireo bellii pusillus*), light-footed Ridgway's rail (*Rallus longirostris levipes*), western snowy plover (*Charadrius nivosus nivosus*), tidewater goby (*Eucyclogobius newberryi*), and salt marsh bird's-beak (*Chloropyron maritimum ssp. maritimum*) (NBVC Point Mugu, 2019); (NBVC Point Mugu, 2020). Based on the recent surveys and the NBVC INRMP, the only federally listed species known to occur at NBVC Point Mugu at the project site is the least Bell's vireo.

Since P-026, building PM-508, building PM-385, and hangar 365 sites are already developed and largely or entirely impervious surface (enclosure 2), no habitat for listed species exists at those sites. It is determined, there would be no effect on threatened or endangered species associated with construction or building renovation at the P-026, building PM-508, building PM385, and hangar 365 sites.

The proposed P-025 hangar site was previously developed as a base golf course in 1964 and currently contains habitat classified as California Annual and Perennial Grassland with intermixed Western Semi-Desert/Mediterranean Alkali-Saline Wetlands, largely consisting of grasslands, wetlands/salt pannes, disturbed and developed areas, and drainage ditches. Based on

the habitat present in the proposed project area, the 2019 NBVC Point Mugu INRMP (NBVC Point Mugu 2019) and the 2019 Listed Species and Biological Opinion Comprehensive Monitoring Report to United States Fish and Wildlife Service (NBVC Point Mugu 2020), the only federally listed species that is present in the P-025 project area is the least Bell's vireo. The proposed action would have no effect on other federally listed species that occur on NBVC Point Mugu. Other species are not known to be present within the proposed project area, and as discussed below, airfield operations and noise outside the proposed project area would be similar to existing conditions.

The federally endangered least Bell's vireo has been recorded sporadically in low numbers in various willow (*Salix* spp.) and mulefat (*Baccharis salicifolia*) patches and other upland habitat sites at NBVC Point Mugu since 2009. Between 2016 and 2018, up to four pairs were believed to have bred on NBVC Point Mugu. In addition, surveys conducted in 2019 and 2020 observed three breeding pairs of least Bell's vireo within or near the project area (enclosure 4). Two of the pairs were observed in sites dominated by non-native species such as myoporum (*Myoporum laetum*) and other non-native annual plant species, as well as coyote brush (*Baccharis pilularis*) (NBVC Point Mugu 2020). As most natural areas at NBVC Point Mugu are dominated by salt marsh, there is little suitable least Bell's vireo habitat to support more than a few nesting pairs per year (NBVC Point Mugu, 2019). Surveys occur at NBVC annually for least Bell's vireo and will continue, including weekly surveys when nesting activity is observed (including habitat adjacent to the future P-025 site).

Construction and Operations Impacts

Construction of the P-025 hangar would permanently or temporarily impact up to 38.5 acres of grassland, wetland, and disturbed/developed habitat and would displace wildlife present within the project footprint and vicinity. This would represent a loss of less than 1.2 percent of the total undeveloped habitat at NBVC Point Mugu. The habitat types that would be affected are disturbed scrub and non-native grass habitats on NBVC Point Mugu, with similar habitats occurring in the immediate vicinity of the project area. Also, consistent with the NBVC INRMP stated management objectives, NBVC Point Mugu continues to restore habitat on base for a variety of sensitive species, including least Bell's vireo. Therefore, it is likely additional and higher quality habitat would be available in the future for vireos to supplement any loss of this marginal habitat from development within the old golf course.

Pre-construction preparation of the project site (e.g., grading, filling) would require vegetation removal. Given that two to three breeding pairs have been detected in the proposed project area in recent years, removal of vegetation during the nesting season could impact least Bell's vireo that may nest on site. Therefore, to avoid potential loss of least Bell's vireo nests, vegetation removal would take place outside of the nesting season (March 1 through September 31); thus, no least Bell's vireo nests or individuals would be directly impacted by vegetation clearing. Once the vegetation is removed from the project site construction activities will be able to occur year-round without any potential risk of impacting least Bell's vireo nests or individuals. With

the vegetation in the proposed project area removed, breeding pairs that return would likely relocate to other habitats nearby. Given that the habitat in the proposed project area is sub-optimal and other areas of similar or better quality habitat exist elsewhere on base and in the surrounding area, birds would likely relocate with no adverse effect on least Bell's vireo future productivity. Upon completion of construction activities, temporarily impacted areas would be restored per the standards and measures outlined in the INRMP (NBVC Point Mugu, 2019).

If least Bell's vireos return and breed near the proposed project site, they could be exposed to construction-related noise. Noise associated with construction activities could affect birds in multiple ways, including altered vocal behavior to mitigate masking, reduced abundance in noisy habitats, changes in vigilance and foraging behavior, and impacts on individual fitness (Shannon, 2016). However, bird populations at NBVC Point Mugu are already exposed to elevated noise associated with aircraft noise and military industrial and training operations. As a result, indirect impacts from construction noise are expected to be minimal because the ambient noise levels within the vicinity are elevated under existing conditions and would be unlikely to substantially increase given the relatively minor and temporary nature of the proposed construction activities. Least Bell's vireos have also been documented at NBVC and other sites nesting successfully in areas with human disturbance, being able to tolerate more disturbance than previously suspected. At NBVC Point Mugu, a pair has had a territory and successfully nested directly adjacent to a parking lot with frequent human and vehicle activity, including regular commercial 18-wheeler truck activity.

Impacts to least Bell's vireos on other parts of base from Stingray CBUAS flight operations are expected to be insignificant. Stingray CBUAS flight operations would represent only a 2.4 percent increase in total annual airfield operations at NBVC Point Mugu. The increase in operations would be within the typical fluctuations in aircraft operations at military airfields from one year to the next. Bird/Animal Aircraft Strike Hazard (BASH) would continue to be managed in accordance with the base's BASH Management Plan.

Based on noise modeling using NOISEMAP software to calculate aircraft noise levels of the Proposed Action, projected noise with Stingray CBUAS flight operations would be similar (less than 0.1 decibel increase in community noise equivalent level) to existing aircraft operations at NBVC Point Mugu, and there would be no change to the existing noise contours. The Stingray CBUAS would be quieter than six of the aircraft currently operating at NBVC Point Mugu. Bird populations at NBVC Point Mugu are already exposed to elevated noise associated with aircraft overflights. Therefore, given the minimal increase in flight operations, noise levels similar to existing aircraft operations, and relatively low presence of the species at NBVC Point Mugu, effects to least Bell's vireo from Stingray CBUAS flight operations would be negligible.


Conclusion

Based on the above discussion, the Navy has determined that implementing the proposed action may affect, but is not likely to adversely affect, the least Bell's vireo. If returning vireos

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nest in habitats adjacent to the project site, effects of construction noise are not expected to be significant. Any nesting pairs found in the immediate area would be monitored as part of NBVC's annual ongoing vireo monitoring efforts. The proposed action would have no effect on other federally listed species at NBVC. The Navy appreciates consideration by the USFWS of the proposed action and requests the USFWS's concurrence with the Navy's determination. The U.S. Navy's point of contact on this issue is Martin Ruane, Natural Resources Manager, who can be reached at COMM: (805) 989-3808 or martin.ruane@navy.mil.

Sincerely,


J.E. CHISM
Captain, U.S. Navy
Commanding Officer

Enclosures: 1. Location of NBVC Point Mugu
2. Proposed Stingray CBUAS Squadron Hangar Project Area
3. Proposed Stingray CBUAS Training and Maintenance Facilities Project Area
4. Proposed Stingray CBUAS Squadron Hangar Notional Hangar Layout and
Observed Least Bell's Vireo Sites

Copy to:
United States Fleet Forces, N46
Regional Environmental Counsel
NAVFAC Atlantic, EV2

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NBVC Point Mugu. (2019). Final Integrated Natural Resources Management Plan, Naval Base Ventura County Point Mugu and Special Areas.

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Shannon, G. M. (2016). A synthesis of two decades of research documenting the effects of noise on wildlife. *Biological Reviews*, 91(4), pp.982-1005.



Enclosure 1. Location of NBVC Point Mugu



Enclosure 2. Proposed Stingray CBUAS Squadron Hangar Project Area



Enclosure 3. Proposed Stingray CBUAS Training and Maintenance Facilities Project Area



Enclosure 4. Proposed Stingray CBUAS Squadron Hangar Notional Hangar Layout and Observed Least Bell's Vireo Sites