United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

OKINAWA DUGONG (DUGONG DUGON), et al.,

Plaintiffs,

v.

JAMES N MATTIS, et al.,

Defendants.

Case No. 03-cv-04350-EMC

ORDER DENYING PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT AND GRANTING DEFENDANTS' CROSS-MOTION FOR SUMMARY JUDGMENT

Docket Nos. 221, 222

This case concerns the planned Futenma Replacement Facility (FRF), a U.S. military facility in Okinawa, and its potential impacts on the Okinawa dugong, an endangered sea mammal important in Japanese culture. Negotiations between the United States and Japanese governments regarding the FRF have a long and fraught history. As explained in more detail below, they ultimately resulted in an agreement to relocate the Marine Corps Air Station Futenma from Ginawan City to an area adjacent to Camp Schwab and the Oura and Henoko Bays.

In 2003, Plaintiffs filed suit pursuant to Section 402 of the National Historic Preservation Act ("NHPA"), challenging Defendant U.S. Department of Defense's plans to pursue the FRF without first "taking into account" (TIA) its potential adverse effects on the Okinawa dugong. Judge Patel, assigned to this case, agreed that Defendants had failed to perform an adequate TIA process and granted summary judgment in Plaintiffs' favor. However, because of political uncertainty about the future of the FRF, Judge Patel administratively closed the case in 2012. In 2014, Defendants informed the Court that they had completed a TIA process.

Presently before the Court are the parties' cross-motions for summary judgment concerning the adequacy of Defendants' TIA process under Section 402 of the NHPA. Plaintiffs

contend that the process was inadequate because Defendants failed directly to consult Plaintiffs, cultural practitioners, local and Okinawa government officials, and failed to notify the public or Plaintiffs that the TIA process was underway. Plaintiffs also contend that, even if the Section 402 TIA process was adequate, Defendants' finding that the FRF would have no adverse effect on the Okinawa dugong were arbitrary and capricious under the Administrative Procedure Act ("APA"), 5 U.S.C. § 706, *et seq.*, because it ran contrary to the scientific evidence and failed to consider important aspects of the problem.

For the reasons explained below, the Court finds in favor of Defendants. Though Defendants' Section 402 process could possibly have been more inclusive, Defendants' efforts were sufficient to satisfy Section 402's modest procedural requirements. Further, Defendants adequately explained their conclusions based on the evidence available to them, such that their conclusions were not arbitrary or capricious under the APA. Plaintiffs' motion for summary judgment is **DENIED** and Defendants' motion is **GRANTED**.

I. FACTUAL AND PROCEDURAL BACKGROUND

A. The FRF and Okinawa Dugong

Since the end of World War II and pursuant to various treaty arrangements, the United States has maintained military facilities on the Japanese island of Okinawa. This case concerns the planned relocation of the existing Marine Corps Air Station Futenma ("MCAS Futenma") in Ginawan City. The United States and Japan agreed to relocate it because its current location became problematic after substantial population growth in the surrounding area. The new site is referred to as the Futenma Replacement Facility ("FRF"). The plans for the FRF have been evolving for more than a decade pursuant to negotiations between Japan and the United States. According to a 2006 roadmap agreement, the two countries agreed that the FRF would be located offshore the existing Camp Schwab, near Henoko Point. The FRF plan calls for a "V-shaped" runway that will be partially built on landfill extending into Oura and Henoko Bays.

The intrusion into the Bays prompted this litigation. The waters in question are a habitat

used by the Okinawa dugong, an endangered sea mammal. Plaintiffs,[1] a group of Japanese individuals and environmental organizations concerned about the Okinawa dugong's fate and the U.S.-based Center for Biological Diversity, filed suit in 2003 after relocation plans were first announced under Section 402 of the National Historic Preservation Act (NHPA). Section 402 of the NHPA provides:

> Prior to the approval of any undertaking outside the United States that may directly and adversely affect a property that is on the World Heritage List or on the applicable country's equivalent of the National Register, the head of a Federal agency having direct or indirect jurisdiction over the undertaking shall take into account the effect of the undertaking on the property for purposes of avoiding or mitigating any adverse effect.

54 U.S.C. § 307101(e). Plaintiffs alleged that the Okinawa dugong was "property" on Japan's equivalent of the National Register within the meaning of Section 402. Judge Patel, then-presiding over the case, agreed and declined to dismiss the case. *See Dugong v. Rumsfeld*, 2005 WL 522106 (N.D. Cal. Mar. 2, 2005) ("*Dugong I*"). Consequently, the NHPA required that, "[p]rior to the approval of any undertaking outside the United States [*i.e.*, the FRF] that may directly or adversely affect [the Okinawa dugong]," Defendants "shall take into account the effect of the undertaking on the [dugong] for purposes of avoiding or mitigating any adverse effect." 54 U.S.C. § 307101(e). After Judge Patel's earlier ruling and a 2006 announcement about a new roadmap for the FRF, plaintiffs filed a second amended complaint and Defendants produced an administrative record to prepare for summary judgment.

At summary judgment, Judge Patel held that the FRF was a "federal undertaking" within the meaning of Section 402 of the NHPA, *Dugong v. Gates*, 543 F.Supp.2d 1082, 1101 (N.D. Cal. 2008) ("*Dugong II*"), and that Defendants were therefore required to "take into account the effect of the undertaking on the property for purposes of avoiding or mitigating any adverse effect." 54 U.S.C. § 307101(e). This is referred to as the "take into account" (TIA) process. Judge Patel sketched the basic outline of what a Section 402 TIA process should look like and held that

[1] Plaintiffs are the Center for Biological Diversity, the Turtle Island Restoration Network, the Japanese Environmental Lawyers Federation, the Save the Dugong Foundation, and individuals Anna Shimabukuro, Takuma Higashionna, and Yoshikazu Makishi. *See* First Suppl. Compl. (Docket No. 152-1) ¶¶ 8-15.

Defendants had failed to comply. *Dugong II*, 543 F.Supp.2d at 1102-1111. She entered summary judgment for Plaintiffs and ordered Defendants to comply with NHPA Section 402. Due to subsequent uncertainty over the future of the FRF, Judge Patel held the case in abeyance and administratively closed it in February 2012, instructing the parties to move to re-open the case "[w]hen plans for Henoko become more finalized or are abandoned." Docket No. 147 at 4-5.

Over two years later, in April 2014, Defendants filed a notice that they had completed the Section 402 TIA process. *See* Docket No. 151. With the Court's leave, Plaintiffs thereafter filed a supplemental complaint. *See* Docket No. 152-1. Defendants successfully moved to dismiss for lack of jurisdiction, *see* Docket No. 186, 188, but the Ninth Circuit reversed and remanded. *See* Docket No. 198. On remand, the parties filed cross motions for summary judgment concerning the adequacy of Defendants' TIA process and the soundness of their conclusions under the APA. Those motions are now before the Court. *See* Docket Nos. 221, 222, 223.

B. Defendants' "Take Into Account" Process

Subsequent to Judge Patel's order, Defendants undertook a TIA process that involved several components. Each is described in more detail below, but the steps included, *inter alia*, (1) a report on the FRF's potential impact on the dugong's *biological* well-being prepared by Dr. Thomas Jefferson (the "Jefferson Report"); (2) a report on the FRF's potential impact on the dugong's *cultural* significance prepared by a private research institute, International Archeological Research Institute, Inc. (IARII) (the "Welch 2010 Report"); (3) the Japanese government's Environmental Impact Statement ("EIS") regarding the FRF; and (4) miscellaneous other reports or sources of information described below. *See* US 10997. After considering these reports, Defendants rendered their findings that the FRF would not have adverse effects on the dugong.

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The various reports make reference to certain locations, including Henoko Bay, Oura Bay, and Kayo; the maps below illustrate the geography of the FRF and those areas.

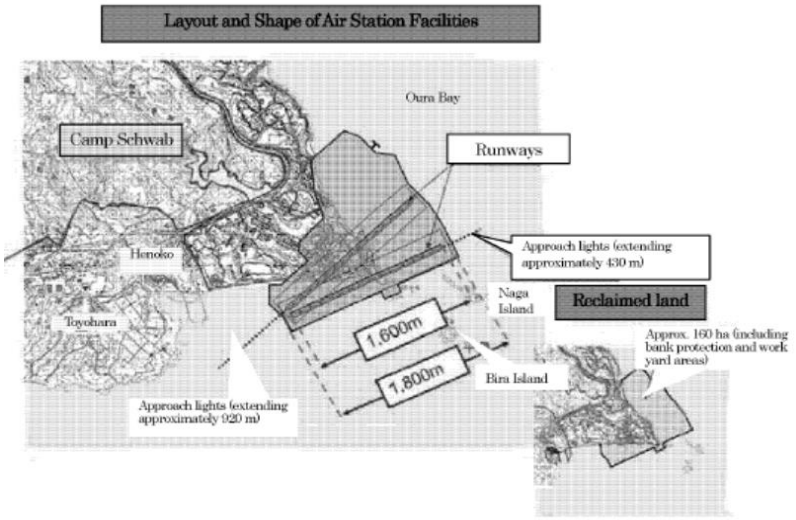

Fig. 2.2.5.1 Layout and Shape of Air Station Facilities

US 4797 (Japanese EIS)-

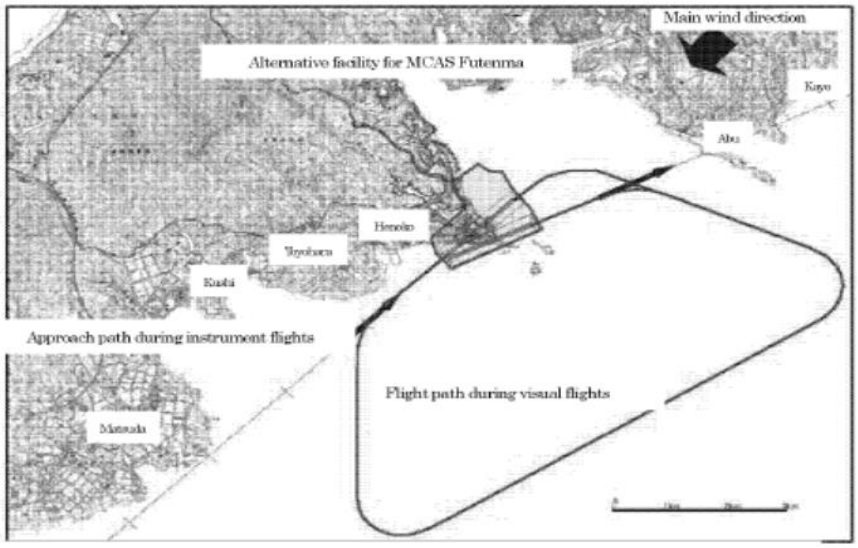

Fig. 2.2.6.1 Flight Path (In case of northeasterly wind)

US 4803

The following reports constitute part of Defendants' TIA process.

C. Jefferson Report (Biological Assessment)

Defendants commissioned an internal study by Dr. Thomas A. Jefferson titled "Biological Assessment of the Okinawan Dugong: A review of Information and Annotated Bibliography Relevant to the Futenma Replacement Facility." US 3356. The report consists of a literature

review concerning the taxonomy of the dugong, their distribution and abundance, typical lifespan, ecology, behavior and social organization, and threats to their population. *Id.* The general threats to the Okinawa dugong identified were hunting, bycatch, vessel traffic, chemical pollution, and habitat loss/degradation. US 3368-69. The threats directly linked to military activities were identified as pollution (noise, chemical, sedimentation, and radioactivity) and habitat destruction/alteration. US 3369.

Dr. Jefferson concluded that, for conservation purposes, "[m]anagement actions must be focused on human activities known to be actual causes of mortality for dugongs in this population, and this generally means the closure or relocation of gillnet and setnet fisheries that catch dugongs to locations outside the population's range." US 3373. He also noted that stopping the FRF would be futile in preserving the dugong without additional conservation efforts: "Eliminating activities that may have the potential to limit population recovery (*e.g.*, the FRF), while ignoring the issues **known** to be causing population decline (e.g., possible illegal hunting and incidental catches in fisheries), will not help the population." *Id.* (emphasis in original). Rather, "[a]n integrated management plan . . . is the only way to preserve this dugong population." *Id.*

D. Welch 2010 Report (Cultural Assessment)

Defendants commissioned the IARII, a private research consulting firm, to produce a report on the cultural significance of the Okinawa dugong. US 4163. Although the bulk of the report focuses on the cultural significance of the dugong, it also reviews biological and ecological literature concerning the dugong, including threats to their existence. US 4175-4184.

1. Sources of Information

IARII assembled a team of archeologists, a cultural anthropologist, and a biologist to prepare the report. The team consulted with cultural and natural resource specialists at Marine Corps Base Camp Butler and ultimately interviewed 16 informants, including seven archaeologists, two biologists, three archivists/professors, and four folklorists or individuals with local traditional knowledge about the dugong. The researchers also visited a number of organizations and museums, including Uruma City Cultural Sea Museum, University of the Ryukyus Museum, Higashi Village Museum, Ishigaki City Yaeyama Museum, Nakijin Village

Museum of Culture and History, Nago Museum, Okinawa Churaumi Aquarium, and the Okinawa Prefectural Archaeology Center (organizations which were on Plaintiffs' list). US 4170. Additionally, the team visited the Okinawa Prefectural Board of Education and municipal Boards of Education nearest to the proposed project (Chatan Town, Ginoza Village, Nakijin Village, and Nago City). The researchers also conducted a review of relevant academic literature.

2. Findings of Adverse Effect

Based on their research, the authors of the Welch report discussed both direct and indirect effects on the dugong's cultural significance. Direct effects were those that might directly affect the *cultural* importance of the dugong, while indirect effects were those that might cause *biological* harm to the species and thereby indirectly diminish its cultural significance.

With respect to the "direct" effects, the report concludes:

> Based on the results of this study, the construction and operation of the FRF should have little direct adverse impact on the cultural significance of the dugong or on traditional cultural practices associated with the dugong. Since the area in which the FRF will be built . . . is already off-limits to the general Okinawan population, no cultural events or social/religious ritual ceremonies involving the dugong take place in these areas. Because of the dugong's rareness, its status as a GOJ endangered biological species, and its designation as a protected cultural property, hunting has not taken place, except perhaps surreptitiously and only occasionally, since the immediate post-war years. Because hunting is now illegal, the FRF will not directly affect hunting.

US 4253. The study noted, however, that certain rituals honoring the sea deity are still held in Henoko Village adjacent to Camp Schwab and that "temporary construction activities and later operational activities could disturb the performance of these rituals." *Id.* It further concluded that although the seagrass beds in the vicinity of Henoko might be impacted by the FRF because of the feeding trenches in the area, "the project research found no indication that any culturally important activities are conducted in or associated with this area." *Id.*

The Welch report then discussed "indirect" effects on the dugong's cultural significance based on its assessment that "[i]f the dugong population is lost, then it is likely that those traditions that help create Okinawan identity will become increasingly meaningless to future generations." US 4254. The report identified six potential threats to the dugong's existence:

hunting, bycatch/incidental catch, vessel traffic, acoustic disturbance, chemical pollution, and habitat loss/degradation. AR 4180-83. Among these, the report stated that habitat destruction/alteration, pollution, and vessel collisions are the potential threats from military activities. Based on review of biological literature, the report stated that although dugongs were not currently living in Henoko Bay, "destruction of seagrass beds along Henoko Bay will limit areas that could provide habitat in the event of recovery and increase in the current dugong populations." US 4254. It also states that "noise from the construction and operation of the FRF could still affect the dugongs in [the area to the east of Oura Bay]." US 4255.

Although the Welch report identified these "potential" or "possible" effects, it made no attempt to quantify the likelihood that the threats would materialize. In other words, the Welch report does not analyze the FRF or related operations and the likelihood that they would cause harm to the dugong. It merely identified a list of possible threats worth consideration.

E. Bi-Lateral Expert Study Group (2010)

The United States-Japan Security Consultative Committee also directed a group of experts to study the FRF's location, configuration, and construction method to help achieve the earliest possible relocation. US 7306. This study evaluated two alternative construction plans in consideration of the safety of local communities and U.S. military personnel, operational requirements for U.S. forces, noise impact, environmental concerns, and effects on the local community. US 7307. It concluded that one plan (the "V" plan) would require losing a beach on the east side of Camp Schwab and thus "result[] in the loss of some animal and plant habitat," without further elaboration. US 7309. The other plan (the "I" plan) would preserve the beach but "the impact on animal and plant habitat remains to be assessed." US 7311. Plaintiffs have cited the latter language as evidence of an incomplete process, but because Defendants have adopted the "V" plan, the language regarding the "I" plan is not material to the question of compliance with Section 402.[2]

[2] Plaintiffs have not argued, for example, that the "I" plan was an under-explored alternative that would have been less harmful to the dugong.

F. Survey of Marine Mammals in Okinawa (SuMMO) (2011-2012)

This report was commissioned to update the Integrated Natural Resources/Cultural Resources Management Plan for Marine Corps Base Camp Smedly D. Butler, of which Camp Schwab is a part. US 9245. This report did not draw conclusions about the density of dugong presence in or around Henoko and Oura Bay. AR 9269. It is discussed where relevant below.

G. Japanese Environmental Impact Study ("EIS")

Defendants relied heavily on an independent Environmental Impact Study undertaken by the Japanese government pursuant to Japanese law, a draft of which was released in in 2009 and a final version published in December 2012. *See* US 11056. The Japanese EIS is over 1600 pages long. US 4793. It involves a comprehensive analysis of how likely the FRF's construction and planned manner of operation is to impact the Okinawa dugong. The Japanese EIS also underwent a robust public notice and comment process. These components are discussed below.

1. Public Notice and Public Comment

The Japanese EIS had 3 phases of public comment: first, about the planned scope of the EIS; second, about the draft EIS; and third, about the final EIS. *See* US 3032 (flow chart of process). The administrative record includes an English translation summary of 32-pages of public comments regarding the Japanese EIS's proposed scoping. *See* US 1218. With respect to seagrass beds and dugong, the comments include, *inter alia*, concerns that "[t]he sea areas in the vicinity of Henoko are considered as very important breeding ground for the small population of Japanese dugongs," comments regarding whether the planned survey period would be of sufficient duration, whether research about dugongs in other countries could be applied directly to the Okinawa dugong, whether the planned survey to observe dugong was sufficiently broad in its geographic scope, how the survey would account for measuring impact of sound on dugong, and so on. US 1238-41. Indeed, about four pages of translated public comment in the Japanese EIS are dedicated specifically to the Okinawa dugong.

Plaintiffs do not allege that they were unable to participate in this process. As explained above, the record indicates that members of the Japanese public were able to participate. The Okinawa Prefecture, akin to the regional government of Okinawa state, was also actively involved

in the public comment process. The then-governor of Okinawa, Hirokazu Nakaima, submitted public comment regarding the proposed scope of the Japanese EIS on December 21, 2007 and January 21, 2008. *See* US 1251, 1319. The translated documents are 28-29 pages long. The comments are robust and detailed, and include, among other things, recommendations for how to assess impact caused by acoustic noise and vibrations, aircraft noise, water contamination, turbidity caused by sediments, impact on seaweeds and seagrasses used by dugong, and impacts on the dugong themselves. *See*, *e.g.*, US 1269-71.

On March 4, 2008, the Department of Cultural and Environmental Affairs of the Okinawa Prefectural Government also submitted "Comments on the Additions and Revisions to the Environmental Impact Assessment Scoping Document" for the FRF. US 1567. This also includes comments regarding seagrass beds and dugong, including, for example, that the EIS should consider "[c]hanges in the use and visit to the sea area and seagrass beds," "[c]hanges in the function and value of habitat, and their impacts on sustainability of individuals or population of dugongs in the Henoko coastal area," and "[i]mpacts on sustainability of dugong's population in Okinawa based on the degree of impacts on sustainability in the coastal area of Henoko." *See* US 1575-77.

Governor Nakaima also submitted comments regarding the final EIS document, sharply criticizing the Japanese central government's report, generating significant attention in Japanese media. Defendants were aware of these criticisms and internally circulated media coverage. *See* US 8150-8158 (e-mail thread reproducing media coverage of Okinawa prefecture's criticism of the Japanese EIS). This included criticism of the report's findings regarding potential effects on the dugong but the substance of the critique is unclear from the record.

2. Substantive Findings of Japanese EIS

Whereas the Welch and Jefferson reports only identify *potential* adverse effects to the dugong from military activities, the Japanese EIS purports to determine the *likelihood* such harm will occur in light of the specific construction and operation plans for the FRF. The Japanese EIS's analysis with respect to construction and operation are summarized below.

a. Adverse Effects Related to Construction

The Japanese EIS considered adverse effects related to noise, vibrations, night lighting, and ship collision as summarized below.

i. Noise

The report focused on construction activities likely to produce noise below the surface: piling work and riprapping work. US 6140. It calculated the decibel range that could affect dugongs and the geographic range in which harm could result. US 6141. It concluded that because there are shore reefs at the mouth of the Oura Bay between the construction site and sea areas off Kayo where dugongs live, "it is expected that these shore reefs will block the underwater noise." *Id.* Thus, dugongs near Kayo would not be adversely affected. However, the report notes that noise could reach the dugong to the southwest if they were to move to that area or if they actually entered the Oura Bay. *Id.*

ii. Vibration

The Japanese EIS also analyzed the effect of construction-related vibrations of the sea floor. It noted the likely magnitude of such vibrations, how far they could be felt, and at what magnitude they might affect dugong. The report concluded that because "[d]ugongs rarely touch the sea bed except when they graze seagrasses," and because "the feeding ground for dugongs that live around the project implementation site is located in sea areas off Kayo, over 5km away from the piling site," "it is projected that sea bed vibrations during the construction work will have little practical effect on the behavior of dugongs." US 6141.

iii. Night Lighting

The report explained that marine construction would only occur in the day time, and that night lighting was expected only to be used for a short three-month period during pavement work at the airport. Because dugongs "are highly likely to stay in sea areas off Kayo . . . it is assumed that little light from the lighting apparatuses . . . will reach [them]." *Id.*

iv. Navigation of Work Ships

The Japanese EIS noted that ship routes would be set to avoid areas where the dugong have been observed so encounters between the ships and the animals would be unlikely, but that if

dugong moved out of those spaces, they might encounter ships. US 6141. Alternatively, if they entered Oura Bay, the dugong might be caught in gill nets. US 6141.

In sum, with respect to construction activities, the Japanese EIS concludes: "it is projected that the effects of muddy water, noise, and the navigation of work ships during the construction work will not reach the sea areas where the seagrass beds that dugongs use as feeding grounds are distributed. It is also projected that if dugongs remain within their hitherto observed habitat, there is no possibility that implementation of the project will change the functions and value of dugongs' living environment. Nor will implementation of the project practically affect the lives of individual dugongs that live around the project implementation site. [Finally] nor is there practically any possibility that implementation of the project affects the conservation of all individual dugongs in Okinawa prefecture." US 6142.

b. Adverse Effects Related to Operational Use

The Japanese EIS considered the following impacts of operational use of the FRF (post-construction): decreased availability of sea surface (due to reclamation of sea land to expand the runways); water quality; aircraft noise; and ship navigation.

i. Reduction in Sea Surface

The report considered whether the reduction in sea surface would affect the dugong's habitat or feeding grounds. It concluded that "the habitat . . . will not decrease much" and "will not decrease areas where seagrass beds . . . grow" because the main dugong feeding grounds are in a different location, off Kayo. AR 6145. The report also concluded that "changes in ocean flows, waves, and water quality due to the existence of facilities . . . will practically not alter the living environment of seagrass beds, the main feeding grounds for dugongs." *Id.* The new marine structures will not interfere with dugong travel routes because they are not observed in the areas where the land will be reclaimed, or where fuel piers and approach lights are to be installed. *Id.*

ii. Aircraft Noise

The report considered the noise levels of aircrafts, their flight paths, and the extent to which noise might penetrate the sea in light of the particular flight trajectories and the noise levels that might affect the dugong. The report concludes that "it is projected that sound pressure levels

that exceed those which affect dugongs will be limited to small areas directly below the flight routes," and that "low-frequency sounds . . . are projected to go below the lowest low-frequency sound pressure level that affects dugongs." *Id.* at 6145-46.

iii. Water Quality

The report concludes "there will be practically no change to the quality of water around seagrass beds off Kayo, a major feeding ground for dugongs." US 6146.

iv. Ship Routes

The report projected that ship routes would be unlikely to affect the dugong because the routes were planned through areas where dugong are not known to live and have not been observed. *Id.*

In sum, the Japanese EIS concludes that "if dugongs remain within their hitherto observed habitat, there is no possibility that implementation of the project changes the functions and value of their living environment," and that "[t]here is practically no possibility that implementation of the project affects the conservation of all individual dugongs in Okinawa Prefecture." US 6147.

H. Defendants' Findings

Defendants considered the aforementioned reports in making their independent findings. They determined the dugong had cultural significance for four distinct segments of Japanese society, identified "those aspects of the dugong that are intrinsic to its cultural significance," and then determined whether the FRF would adversely affect such aspects. As in the Welch report, Defendants considered both direct impacts on the dugong's cultural significance and indirect impact that could result from biological harm to the dugong.

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1. Direct Effects on Cultural Significance

Defendants' findings regarding cultural significance are summarized in the table below.

Group For Whom Dugong Is Significant	Intrinsic Cultural Significance	Finding of Adverse Effect
1. Researchers and scholars who "perceive the Okinawa dugong as having cultural significance related to its historical role and its inclusion in Okinawa mythology, songs, and oral traditions," US 10986	Cultural knowledge or data available for conducting research, which is contained in archives, archeological deposits, and memories of people who practice rituals and pass on oral traditions	Little or no potential to affect the repositories housing cultural knowledge
2. Ritual practitioners who "possess some specialized knowledge about the role of dugong in traditional myths, oral histories, rituals, and songs," including some for whom "dugongs are perceived as intermediaries between the world of humans and the world of the supernatural," US 10986	Cultural and historic knowledge embodied in songs, oral traditions, myths, and rituals, although the places where rituals are conducted and their timing may also have elements of significance	Little or no potential to affect because no rituals actually occur within the various named seagrass bed areas
3. Aragusuku-jima Island community for whom "oral traditions and records document[] the past requirement that they hunt the dugong and furnish dugong meat in lieu of paying taxes to the Kingdom," US 10986	Oral traditions and written records regarding hunting dugong during the Ryuku Kingdom Period and practices such as hunting, dugong-related rituals, and the shrines where they occur	No potential to affect islands where rituals and festivals are performed and little to no potential to affect the knowledge of the people of the islands
4. Popular culture in the sense that "Okinawans have rallied [around the dugong symbol] to protest the continued use of areas on Okinawa by the U.S. military," relating to "public perception of the animal as an endangered species having special ties to Okinawa," *id.*	The dugong's image and arguably its survival as a local population because "symbols are more effective if they are tied to something tangible and able to be seen periodically by the community that uses the symbol," US 10987	Minimal potential to result in extinction or significant degradation of the species, so "no potential to affect the use of the dugong as a political symbol"

Relatedly, Defendants recognized potential indirect effects on the performance of dugong-related rituals in Henoko Village as a result of noise or visual intrusions during construction and operation. But "[t]he secretive nature of the ritual practitioners has prevented the USMC from acquiring information important to determining the affect [sic], if any," US 10993, that would be caused. The report states that if the information becomes available, Defendants will make a determination. *Id.*

2. Indirect Effects on Cultural Significance Through Biological Harm

Defendants also recognized that biological harm to the dugong could adversely affect the creature's cultural significance. Defendants' analysis presumed that "an activity is deemed to have an adverse effect either on the dugong as a natural monument, or on an intrinsic element of the dugong from a cultural perspective, if the activity destroys, harms, or alters either the dugong or its intrinsic elements." US 10987. Thus, "in order for the Undertaking to have an adverse effect on the Okinawa dugong, dugongs would have to be present in the [Area of Potential Effects ("APE")] and subject to activities that could destroy, harm or alter those intrinsic characteristics that make the Okinawa dugong a natural monument." US 10988.

A key basis for Defendants' analysis is that although "the data are not sufficient to establish population size, status, and viability," the data were "sufficient to conclude that a remnant population of dugongs exists around Okinawa," sighted "sporadically" or "intermittently" in the FRF or FRF footprint area. US 10988. Moreover, seagrass beds used for feeding were found to the north of the FRF at Kayo and south in Henoko Bay, outside the FRF area. *Id.* The low density of dugong presence in the FRF area is critical to Defendants' ultimate finding of "no adverse effect" "because of the extremely low probability of Okinawa dugongs being in the APE" and the conclusion that, to the extent they were present, "the construction and operational activity is primarily of the type that would not have an adverse effect." *Id.* The only exception noted was construction noise. *Id.*

Defendants' analysis of each of the adverse effects associated with construction and operation is summarized below.

a. Construction Effects

With respect to construction effects, Defendants considered vessel impacts, land reclamation, red soil runoff, and acoustic and visual disturbance:

Vessel Impacts: Defendants concluded that adverse effects from collisions "are highly unlikely given the observed low presence numbers of individual dugong in Henoko and Oura bays." US 10988. Further, with respect to ship noise, Defendants cited a study that noise would interrupt feeding time only 0.8-6% of the time, which "would not affect survivorship." *Id.* Though reduced nutrition could reduce reproductive rates, "due to the very small and infrequent presence of Okinawa dugong in the APE, there would be no adverse effect on reproductive rates." *Id.*

Land reclamation: The FRF-construction will result in loss of 7.3% of the seagrass beds in the sea area in front of Henoko Bay and 37.7% of the seabeds on the side of Oura Bay (13% of the areas in both bays combined). US 10989. Defendants' analysis of seabeds is specific and non-conclusory. Defendants explained:

> As shown in Table 6.15.2.3.3 of the GoJ DEIS (Okinawa Defense Bureau 2009), the total area of seagrass beds with 5% coverage or more that would disappear due to FRF construction is 78.1 ha: 3.6 ha in the sea area in front of Henoko Bay and 42.5 ha on the side of Oura Bay. This amounts to the loss of 7.5% of the seagrass beds in the sea area in front of Henoko Bay and 37.7% of the beds on the side of Oura Bay (13% of the 600.4 hectares in both bays combined). Based on an independent evaluation of the data provided in the GoJ DEIS and the data collected and presented in the USMC [United States Marine Corps]'s expert's report (Encl 1), the USMC finds that, while the seagrass beds in Henoko and Oura bays are a potential natural habitat and food source for the Okinawa dugong, because these seagrass beds are not consistently or routinely used by resident dugong and there are other seagrass beds sufficient to maintain the current population of Okinawa dugong, the loss of some of the seagrass beds in Henoko and Oura bays is not considered an adverse effect on the Okinawa dugong as a natural monument. Accordingly, loss of seagrass beds from FRF construction will have no adverse effects on the Okinawa dugong.

US 10989. For the proposition that other seagrass beds outside of Henoko and Oura Bays are sufficient, Defendants cite DEIS Figure 3.1.5.4 in the Japanese EIS. *Id.*, n. 5. The text accompanying that chart states that "[t]here is about 2,000 ha of seaweed beds distributed around Okinawa Main Island" and "the larger beds are concentrated on the east side of the island." US

5008. The Japanese EIS identifies evidence of feeding trails showing that the dugong frequent the seabeds off of Kayo (outside the FRF area) and only use the Henoko Bay seabeds (in or near the FRF area) infrequently. *See* US 5020-5022. Thus, although the Henoko Bay seabeds represent 69% (173 ha) of the 249 ha of available seabeds around Nago City and Ginoza Village, the dugongs do not presently utilize them with frequency. *Id.* Defendants explicitly considered this research in reaching their finding regarding the relationship between lost seagrass beds and potential adverse effects on the dugong.

Red Soil Runoff: Soil runoff has the potential to carry toxins into the sea and lead to bio-accumulation in seagrass beds. Defendants' review of the literature "indicates mixed findings regarding whether or not dugong are susceptible to toxin bio-accumulation." *Id.* Defendants state that despite the lack of evidence of harm to Okinawa dugong or the presence of contaminants in the red soil at Camp Schwab, various mitigation measures will be implemented to reduce the risk. Thus, Defendants conclude that "[w]ith implementation of these avoidance, minimization and mitigation efforts, combined with very low and infrequent presence of Okinawa dugong in the APE, the USMC finds there will be no adverse effects." US 10989-90.

Acoustic Disturbance: Defendants reviewed the Japanese EIS and agreed with its findings regarding impacts associated with noise. US 10990. Specifically, "the impact of underwater sound is not expected to cause physical damage to dugongs, should they be present while construction noise occurs." *Id.* "[A]lthough sound pressure levels during stage 1 of construction could cause impacts [if they are present], cumulative sound exposure is not expected to significantly affect dugong behavior in this area." *Id.* Underwater sound would not cause physical damage but could impact behavior, but only if dugongs are present. *Id.* In light of known dugong behavior, "[s]hould [they] be present when construction activities are initiated, it is anticipated that they will vacate the area while construction noise is occurring." US 10991. In consideration of all the factors, Defendants concluded that "no adverse effects will occur due (1) to the limited use of Henoko and Oura bays by dugongs, (2) the implementation by [Japan] of noise minimization techniques during construction, (3) the suspension by [Japan] of noise-generating activities when Okinawa dugongs are present, and (4) the tendency for Okinawa

dugongs to move to deeper waters when exposed to such noise." *Id.*

Visual Disturbance: With respect to lighting that may make the area undesirable for dugong feeding, Japan "does not intend to conduct any marine construction at night hours with the possible exception of runway paving over a three month period," for which Defendants recommended that Japan "place lighting cones to direct lighting up and away from the water so that light pollution is reduced in the water column." *Id.* No adverse effect was anticipated.

b. Operational Effects

Defendants also considered possible adverse effects related to day-to-day operation of FRF after construction is completed, including vessel impacts, storm-water runoff, and acoustic and lighting disturbance.

Vessel Impacts: Defendants concluded such impacts were "highly unlikely" due to "the infrequency of individual dugong in Henoko and Oura Bays, and the minimal vessel traffic in and out of the FRF with most vessels being large, slow-moving support vehicles." US 10992. If dugong sightings increase, the USMC will evaluate mitigation measures. *Id.*

Stormwater Runoff: Sedimentation from runoff presents "an indirect threat . . . due to potential decline of seagrass habitat." *Id.* Accordingly, the FRF will release stormwaters through sewers that "avoid the seagrass areas in Henoko and Oura Bays." *Id.* It will also use treatment plants and best management practices to ensure "there should be no operational adverse effects from stormwater runoff." *Id.*

Acoustic Disturbance: Possible operational noise includes aircraft operations and relatively infrequent vessel traffic. Experts suggested that "dugong would have to be directly under the flight path of an aircraft to receive any significant sound exposure, and even this exposure would vary according to sea state." US 10993. Japan conducted aerial surveys tracking dugong in helicopters for several hours but observed no behavioral effects on the dugong. *Id.* Accordingly, Defendants concluded there would be no adverse noise effects.

Lighting Disturbance: Night lighting is limited to approach lights along the runway, which is "generally low wattage and typically points upward and away from the water," so it would not have adverse effects. *Id.*

c. Overall Effect on Dugong Population

Defendants also considered declarations previously filed by Plaintiffs in this litigation, arguing that the FRF would contribute to the extinction of the dugong. US 11055 ("The process of analyzing the potential effects of the Undertaking on the Okinawa dugong as a historic property involved considering the declarations submitted by Plaintiffs . . . in the litigation . . . ."). Defendants concluded that "the construction and operation of the FRF will not have adverse effects on the local Okinawa dugong population [Henoko and Oura bays] and consequently will not substantially contribute to the extinction of the entire Okinawa dugong." US 10993. The substance of these declarations is discussed in further detail below in connection with Plaintiffs challenge to Defendants' failure to consult them directly during the take-into-account ("TIA") process.

3. Mitigation Measures

Defendants also considered and adopted several mitigation measures. *See* US 10994-10996. These are not material to the parties' cross-motions.

II. STATUTORY CONTEXT AND LEGAL STANDARD

Where, as here, a case involves review of a final agency action under the Administrative Procedure Act ("APA"), 5 U.S.C. § 706, and review is limited to the administrative record, there are no genuine issues of material fact and summary judgment is appropriate. *Nw. Motorcycle Ass'n v. USDA*, 18 F.3d 1468, 1471-72 (9th Cir. 1994). The Court's role is to "determine whether or not as a matter of law the evidence in the administrative record permitted the agency to make the decision it did." *Occidental Eng'g Co. v. INS*, 753 F.2d 766, 769 (9th Cir. 1985).

Plaintiffs allege that the agency action was unlawful for failure to comply with procedural requirements of Section 402 of the National Historic Preservation Act (NHPA), codified at 54 U.S.C. § 307101(e). Because the NHPA is a procedural statute which does not create a private cause of action, Plaintiffs' challenge is brought pursuant to the APA. *Ctr. for Biological Diversity v. Mattis*, 868 F.3d 803, 816 n.5 (9th Cir. 2017). Section 402 of the NHPA provides:

> **Prior to the approval of any undertaking outside the United States that may directly and adversely affect a property** that is on the World Heritage List or on the applicable country's equivalent

> of the National Register, **the head of a Federal agency** having direct or indirect jurisdiction over the undertaking **shall take into account the effect of the undertaking on the property for purposes of avoiding or mitigating any adverse effect**.

54 U.S.C. § 307101(e) (emphasis added).

Section 402 is the international parallel to Section 106 of the NHPA, codified at 54 U.S.C. § 306108, which similarly requires federal agencies to "take into account the effect of [an] undertaking on any historic property" "prior to the approval of the expenditure of any Federal funds." *Id.* § 306108. Sections 106 and 402 of the NHPA are "'stop, look, and listen' provision[s] that require[] each federal agency to consider the effects of its programs." *Te-Moak Tribe of W. Shoshone of Nev. v. U.S. Dep't of the Interior*, 608 F.3d 592, 607 (9th Cir. 2010) (quoting *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 805 (9th Cir. 1999)). Section 402's requirements are procedural. "If the Government has reached its conclusions about effects and mitigation after a sound NHPA Section 402 process, then it has complied with NHPA Section 402." *Ctr. for Biological Diversity*, 868 F.3d at 818. In contrast, "[i]f the Government has not followed NHPA Section 402 [then] the underlying determinations about effects and mitigation lack validity." *Id.* Section 402 requires the agency to "take into account the effect of [the project] *for purposes of avoiding or mitigating* any adverse effects." 54 U.S.C. § 307101(e) (emphasis added).

In addition to the procedural requirements of Section 402, findings thereunder are subject to review under the APA. Plaintiffs challenge certain of Defendants' findings as arbitrary and capricious under the APA. *See* 5 U.S.C. § 706(2)(A). "The scope of review under the 'arbitrary and capricious' standard is narrow and a court is not to substitute its judgment for that of the agency." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). Nevertheless, the agency must "examine the relevant data and articulate a satisfactory explanation for its action," and agency action may be struck down as "arbitrary and capricious if the agency has relied on facts which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or if the agency's decision is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *Turtle Island*

Restoration Network v. U.S. Dept. of Commerce, 878 F.3d 725, 732-33 (9th Cir. 2017) (quotation and citation omitted).

III. DISCUSSION

A. Did Defendants Comply With NHPA's "Take Into Account" Requirements?

Plaintiffs challenge Defendants' failure to directly consult Plaintiffs; to consult the local Okinawa government; to speak directly with cultural practitioners; or to give public notice or solicit feedback from other interested parties. To the extent Defendants' consultants spoke to academics and others to assess the dugong's cultural significance, Plaintiffs challenge the consultants' failure to specifically query their interlocutors about the FRF's potential impact on cultural significance.

The Court addresses each argument in turn. However, before doing so, the Court determines the legal standard of review for Defendants' compliance with Section 402.

1. Legal Standard

Judge Patel held that the Section 402 TIA process should include "engag[ing] the host nation and other relevant private organizations and individuals in a cooperative partnership" and "consultation with interested parties and organizations." *Dugong II*, 543 F.Supp.2d at 1104. Judge Patel did not, however, identify any particular organizations or persons that Defendants were required to consult. Section 402 itself does not offer any specific guidance on what Defendants' "take into account" process must encompass. Nor have Defendants issued formal regulations or informal guidance interpreting Section 402.

In the absence of statutory text or formal regulations under Section 402, the Court looks to two other sources for guidance: (1) the regulations governing the analogous Section 106 domestic undertakings and (2) informal guidance issued by the U.S. Department of the Interior regarding Section 402 undertakings.

a. Section 106 Regulatory Framework

Section 106 is the domestic analog for Section 402. Its language is identical to Section 402 in all material respects, requiring that "[t]he head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally assisted undertaking in any State and the head of

any Federal department or independent agency having authority to license any undertaking, prior to the approval of the expenditure of any Federal funds on the undertaking or prior to the issuance of any license, shall take into account the effect of the undertaking on any historic property." 54 U.S.C. § 306108. Regulations issued pursuant to that provision guarantee certain entities formal "consulting party" status, which confers the right to provide input regarding potential adverse effects for the agency's consideration, 36 C.F.R. § 800.5(a), to review the agency's draft finding of adverse effect and offer input before it becomes final, *id.* § 800.5(c), and, if an adverse effect is found, to provide input and review proposals for mitigation efforts, *id.* § 800.6. Only four groups of entities are entitled to formal consulting party status under those regulations: a designated State Historic Preservation Officer, Indian tribes and Native Hawaiian organizations, representatives of local governments in whose jurisdiction an undertaking occurs, and applicants for Federal assistance permits, licenses, and approvals. *See* 36 C.F.R. § 800.2(c)(1)-(4).

Section 106 regulations also permit agencies, at their discretion, to grant consulting party status to other "individuals and organizations with a demonstrated interest in the undertaking . . . due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties." 36 C.F.R. § 800.2(c)(5) (emphasis added). To qualify for this category, an individual or organization must submit a written request for the agency's consideration. *See* 36 C.F.R. § 800.3(f)(3). An organization that fails to make a request for discretionary consulting party status cannot later challenge the Section 106 TIA process for excluding them. *See Neighborhood Ass'n of the Back Bay, Inc. v. Fed. Transit Admin.*, 407 F.Supp.2d 323, 334-35 (D. Mass. 2005) (plaintiffs who did not request admission to process as formal consulting parties were not entitled to such status and so their participation rights were comparable only to the general public's).

Finally, the Section 106 regulations provide for public notice and comment to solicit "[t]he views of the public [which] are essential to informed Federal decisionmaking." 36 C.F.R. § 800.2(d)(1). This provides a mechanism for parties who do not qualify as "consulting parties" to submit their views to the agency for consideration, although the public at large does not have the same procedural rights as consulting parties to review and comment on the agency's draft findings

regarding adverse effects and mitigation efforts.

The parties agree that the Section 106 regulations are not binding in this case. Nevertheless, Section 106 and Section 402 have broadly the same purpose; hence, the Section 106 regulations may be informative. *Dugong II*, 543 F.Supp.2d at 1105-1107. At the same time, because Section 402 applies to overseas undertakings, it raises foreign affairs and international relations concerns absent from the Section 106 context. Keeping both these similarities and distinctions in mind, whether Defendants failed to consult with entities analogous to those entitled to consulting status as a matter of right under the Section 106 regulatory framework may be a relevant consideration here. The Court does so as noted below.

b. U.S. Department of the Interior Guidance Re Section 402

Although there are no formal regulations interpreting Section 402, in 1998, the U.S. Department of the Interior (DoI) issued "Standards and Guidelines" for federal agencies to follow when fulfilling their obligations under the NHPA, including Section 402. *See* The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act, 63 Fed. Reg. 20496 (Apr. 24, 1998). With respect to foreign historic properties under Section 402, Standard 4 provides that "[e]fforts to identify and consider effects on historic properties in other countries should be carried out in consultation with the host country's preservation authorities, with affected communities and groups, and with relevant professional organizations." *Id.* at 20504. In a section referring both to consultation under both Sections 106 and 402, the Guidelines provide that "[w]hile specific consultation requirements and procedures will vary among agencies depending on their missions and programs, the nature of historic properties that might be affected, and other factors, consultation should always include all affected parties." *Id.*

The parties agree that the DoI guidelines are non-binding, and they are correct: the guidelines say so explicitly. 63 Fed. Reg. at 20496 (stating the guidelines "have no regulatory effect"). As "guidelines," they are best understood as "goals, not requirements." *Western Watersheds Project v. Bennett*, 392 F.Supp.2d 1217, 1228 (D. Idaho 2005); *see also Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 807 (9th Cir. 1999) (noting that "[c]ontravention

of [DoI guidelines under NHPA Section 106], standing alone, probably does not constitute a violation of NHPA"). In light of the statute's ambiguity and express delegation to the DoI the task of coordinating and directing federal agencies,[3] the Guidelines carry weight under *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944) to the extent they have the "power to persuade." *Id.* at 140.

In connection with the questions who Defendants should have consulted in this case and to what extent, the DoI guidelines are not of significant assistance. Although the guidelines urge that "consultation should always include all affected parties," 63 Fed. Reg. at 20504, the guidelines' use of the word "should" means it is not directive. Moreover, they provide no standard for determining what parties meet the criteria for being "affected." Nor do the guidelines consider the possibility that in some cases, the nature of a property or of a particular undertaking might be such that the number of interested parties is intractable. In this case, the property is the Okinawa dugong, an animal species without a fixed location, and the potential effects on the dugong range from cultural to biological. That sets this case apart from the typical NHPA Section 106 cases in which the cultural property is a geological or archeological feature with a fixed location and only a small number of groups with an entitlement to consulting party status claim to live in or use the affected property.[4] In contrast, here, the cultural significance of the dugong to Okinawan society at large means that a variety of different groups (if not *all* individuals), could claim an interest in the dugong. Moreover, special concerns arise because most potentially interested parties under Section 402, by definition, live in the jurisdiction of another sovereign nation, not in the United States. Because this case is unlike the typical Section 106 case, the Court affords minimal weight

[3] The NHPA charges the DoI with "direct[ing] and coordinat[ing] participation by the United States in the World Heritage Convention." 54 U.S.C. § 307101(b). Section 402(e) codifies and is intended to carry out the United States' obligations under the convention.

[4] *See, e.g., Te-Moak Tribe of Western Shoshone of Nev. V. U.S. Dept. of Interior*, 608 F.3d 592 (9th Cir. 2010) (cultural property was a landscape inextricably linked with tribes' religion and culture, a mountain summit used for prayer and meditation, pinyon pine trees with dietary and ceremonial importance, and burial sites); *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800 (9th Cir. 1999) (claimed areas of historical importance were sites and trails near Huckleberry Mountain); *Tyler v. Cisneros*, 136 F.3d 603 (9th Cir. 1998) (cultural properties were privately-owned homes of historic importance); *Quechan Tribe of Fort Yuma Indian Reservation v. U.S. Dept. of Interior*, 755 F.Supp.2d 1104 (S.D. Cal. 2010) (cultural properties included burial sites, religious sites, ancient trails, and buried artifacts).

to the DoI guidelines to the extent they urge that "consultation should always include all affected groups." 63 Fed. Reg. at 20504.

The Court, in interpreting Section 402 in the absence of persuasive agency guidance on point, must consider that this is a complex case where the nature of the property is atypical, the adverse effects are both tangible and intangible, and there are sensitive foreign relations concerns at play. Under these circumstances, Section 402 affords deference to an agency's determination which parties should be consulted and to what extent. The agency's choices need only be reasonable. *Cf. ONRC Action of Bureau of Land Mgmt.*, 150 F.3d 1132, 1139 (9th Cir. 1998) (an agency interpretation will be upheld if reasonable and does not conflict with the clear language of the statute). Such flexible standard is what Judge Patel envisioned. *See Dugong II*, 543 F.Supp.2d at 1106 (agreeing that "an agency has some discretion in deciding who will be consulted, to what extent, and at precisely what time").

In sum, in the absence of any specific requirement that Defendants consult with any particular person or group, the Court will review the exclusion of certain parties for reasonableness, taking into consideration the analogous requirements under Section 106 described above.

2. Failure to Directly Consult Plaintiffs

In light of the litigation history, it is somewhat puzzling that Defendants did not notify Plaintiffs when they initiated the TIA process. But it is equally puzzling that, after pressing this litigation forward for a decade, Plaintiffs, after prevailing on summary judgment before Judge Patel, apparently did nothing to inquire with Defendants about the TIA process or attempt to insinuate themselves in it.

Though the reasons for this mutual silence are unclear, considering all of the circumstances, Defendants' failure to directly consult with Plaintiffs during the TIA was not unreasonable. Plaintiffs are private individuals and environmental organizations with an interest in the dugong, but they do not qualify as a group analogous to those entitled to formal consulting party status under Section 106. They are not local government representatives or the Japanese equivalent of an official Indian tribe or Native Hawaiian organization in the United States. Thus,

even under the Section 106 regulatory framework, Plaintiffs would not be entitled to consulting party status.

Furthermore, Plaintiffs had other opportunities to make their views concerning the FRF's impact on the dugong known to Defendants. Nearly all of the Plaintiffs are Japanese nationals or organizations. They had an opportunity to participate in the public notice-and-comment EIS process conducted by the Japanese government, which was then considered by the United States government. Although Defendants had obligations under Section 402 independent of the Japanese government's own review, "[d]uplicative, inconsistent efforts are not required." *Dugong* II, 543 F.Supp.2d at 1108. Plaintiffs do not allege that the Japanese notice-and-comment was inadequate to convey their views about the FRF and its potential impact on the dugong. Indeed, even under the analogous Section 106 framework, because Plaintiffs would not have been entitled to consulting party status, they would have been limited to a similar notice-and-comment framework. *See* 36 C.F.R. § 800.2(d)(1).

Additionally, Defendants *did* take Plaintiffs' views into account, albeit indirectly. In particular, four declarations that Plaintiffs filed in earlier stages of this litigation were ultimately included in the administrative record and considered by Defendants. *See* US 10980 ("The process of analyzing the potential effects of the Undertaking on the Okinawa dugong as a historic property involved considering the declarations submitted by Plaintiffs . . . in the litigation . . . ."). These declarations include:

1. Declaration of Isshu Maeda, a Special Researcher at Okinawa Kokusai University. Maeda's specialty is "the significance of natural and living things on human culture in Okinawa Prefecture," and he prepared a declaration "for the purpose of explaining . . . various aspects of the Dugong's historic and cultural importance in Okinawa." Maeda Decl. ¶¶ 1-2 (US 164). In the 13-page declaration, Maeda describes the dugong's role in creation mythology and tsunami legends (*id.* ¶¶ 6-9), its source as a sacred royal food (*id.* ¶¶ 10-12), the use of dugong bones for tools based on religious beliefs (*id.* ¶¶ 13-20), the different names given to the dugong (*id.* ¶¶ 21-25), blessings related to the dugong (*id.* ¶¶ 26-34). Maeda does not opine on the impacts of the FRF.

2. Declaration of Sekine Takamichi, a lawyer with the Japanese Environmental

Lawyers Federation (a plaintiff). US 177. This declaration explains the Japanese legal framework for preservation of cultural properties and that the dugong are considered cultural property under Japanese law.

3 & 4. Declaration of Dr. Ellen Hines, a professor of geography and human environmental studies who has researched dugongs. US 888. Dr. Hines' 30-page declaration is the most substantive with regard to the FRF's potential impact on the dugong. She discusses the threats to the dugong, the importance of seagrass beds to dugong sustenance, threats to seagrass beds, acoustic disturbances and their potential impact on the dugong, and then specifically threats to the Okinawa dugong, Hines Decl. ¶¶ 25-29. She also identifies prospective impacts of base construction and operation on the Okinawa dugong, including noise and acoustic pollution, destruction and degradation of seagrass beds, contaminant pollution, and increased activity (general disturbances and possibility of ship strikes). Hines Decl. ¶¶ 30-34. Dr. Hines later submitted a second declaration in opposition to Defendants' experts on the first round of summary judgment setting forth her critique of their views. *See* US 1195.

Thus, these fairly robust viewpoints about how the FRF might adversely affect the dugong and how the dugong had cultural importance were part of the record considered by Defendants. Indeed, all the prospective impacts identified by Dr. Hines were addressed in the Japanese EIS and Defendants' independent analysis.

In addition, Defendants consulted experts that Plaintiffs themselves had identified in the course of this litigation. *See* US 4170. Thus, Defendants consulted many persons designated by Plaintiffs as sources of relevant information.

Finally, Plaintiffs have not identified any additional information that they would have provided to supplement or broaden Defendants' analysis. Courts have considered the absence of prejudice in rejecting challenges to the sufficiency of consultation under the NHPA. *Cf. Te-Moak*, 608 F.3d at 609 ("Plaintiffs do not identify any new information that the Tribe would have brought to the attention of the BLM had it been consulted earlier in the approval process," "fail to show or even argue that early consultation would have prevented any adverse effect on any yet-to-be-identified National Register eligible PCRI [properties of cultural and religious importance]," and

"do not identify any new information regarding how additional exploration would adversely affect the identified PCRIs"); *Concerned Citizens and Retired Miners Coalition v. United States Forest Serv.*, 279 F.Supp.3d 898, 942 (D. Ariz. 2017) (noting that tribe did not "identify any cultural sites that were not properly considered in the EA"); *Coyote Valley Band of Pomo Indians of Cal. v. United States Dept. of Transp.*, Case No. 15-cv-04987-JSW, 2018 WL 1569714, at *11 (N.D. Cal. Mar. 30, 2018) (tribe had adequate opportunity for consultation and "do[es] not identify any new information they would have provided to the Federal Defendants if they had been consulted earlier in the construction process").

In light of all these factors, Plaintiffs have failed to demonstrate that Defendants acted unreasonably by failing to directly consult them during this process.

3. Failure to Directly Consult Cultural Practitioners

Defendants retained IARII, a private research institute, to research the cultural significance of the dugong. As explained above, IARII assembled a team of archeologists, a cultural anthropologist, and a biologist to consult 16 interviewees. The team did not directly speak with cultural practitioners. Instead, the research team formed a list of persons to be interviewed. A team anthropologist, Dr. Arne Rokkum, with three decades of fieldwork in the region, conducted archival research and "knew individuals who were likely to have information about the dugong in Okinawan culture." US 4170. Cultural and natural resource specialists were also "consulted for the names of individuals who might have expertise regarding the cultural role of the dugong." *Id.* The research team "made it a point to include a number of people from the plaintiffs' list [of individuals and organizations with expertise in regard to the cultural and historical role of the dugong from the court case], but field time was not sufficient to allow us to contact and interview all the people on the list." *Id.* Rather, the research team selected six cultural experts from Plaintiffs' list. *Id.* In addition, IARII's team consulted subject matter experts, museum personnel from several Okinawa area museums, prefectural cultural authorities and several local Boards of Education located near the proposed project, and the Japanese government. US 11072.

Plaintiffs fault Defendants for failing to consult cultural practitioners directly rather than indirectly through academics and other experts. It is true that two members of Defendants' team

recognized the importance of local practitioners. *See* US 3207 (Mr. Hideo Henzan's advice "that if [DOD] really want[s] to learn about the role of Dugongs in Okinawa life then they should take to the local ward mayors and/or the elders living around Henoko Bay"); US 4149 (Dr. Goodfellow's e-mail stating that "the one place where we are really weak is that we did not have sufficient time to contact and get meetings arranged with cultural practitioners. And this is probably an area where the Marine Corps should expect to be challenged in any kind of court case. To do this would have required the Marines to have radically altered the time allowed for this project.").

However, on the facts of this case, Defendants' reliance on academic experts was not unreasonable under Section 402. The agency acknowledged it did not speak directly with cultural practitioners, but determined its analysis was nevertheless reliable because it obtained sufficient information on cultural significance from other sources. In the view of the Navy's cultural resource expert, the "cultural experts [who were consulted] and cultural practitioners [who were not] both do have overlap with one another so if [the investigators] talked to one [group] that could get the gist of what the other does." US 4149. Furthermore, some of IARII's interviewees *had* spoken directly with cultural practitioners who passed on their views to the research team. *See* US 4172-73 ("A few of the informants had talked to cultural practitioners to whom the interview team could not get access and had information regarding rituals and other cultural practices that has never been published . . . . In particular as [a] result of his own research Mr. Isshu Maeda possessed extensive knowledge of unpublished cultural practices related to the dugong."). Plaintiffs have not identified any information that cultural practitioners would have provided that might have led Defendants to discover adverse effects that were not considered.

In addition, the cultural practitioners do not appear to be analogous to any of the four analogous entities entitled to consulting party status as a matter of right under the Section 106 guidelines. They are not analogous to State Historic Preservation Officers, local government representatives, applications for a permit or license, or native tribal organizations. *See* 36 C.F.R. § 800.2(c)(1)-(4).

Finally, it is worth noting that Defendants did not have free access to the cultural

practitioners. *See* US 10987 ("[T]he secretive nature of this group has limited the ability of the study researchers to obtain detailed information concerning the locations, times and activities of most such rituals."). As Plaintiffs' counsel recognized at the hearing, "the traditional native Okinawan communities are quite secretive about some of their practices." Docket No. 230 at 27:9-10. Additionally, the researchers were required to obtain advanced permission from the Japanese embassy before speaking to any Japanese nationals. *See* US 4149. The limited access to the persons in question must be taken into consideration. Plaintiffs have not claimed that cultural practitioners attempted to consult with Defendants but were refused.

In light of these factors, Defendants' decision to rely on academic cultural experts was not unreasonable where, in Defendants' judgment, direct sources were inaccessible but the researchers could access the necessary information through other means.

4. Failure to Consult Local Okinawa Government

Plaintiffs also claim that Defendants did not consult the local Okinawa government. This is not an accurate characterization of the record.

In fact, Defendants' researchers consulted the Okinawa Prefectural Board of Education and municipal Boards of Education in nearby towns, *see* US 11072, which have responsibility over cultural properties and are equivalent to State Historic Preservation Offices in the U.S. (with which consultation is required under Section 106 of the NHPA). *See* 36 C.F.R. § 800.2(c)(1).

Furthermore, as discussed above, Defendants indirectly took into consideration the views of the Okinawa Prefectural Government as set forth in detailed, comprehensive comments submitted by then-governor Hirokazu Nakaima during the Japanese EIS amounting to approximately 60 pages of comments. *See* US 1251, 1319, 8150. Defendants also considered comments from Okinawa's Department of Cultural Affairs. *See* US 1567. These entities could be considered an analog to local government representatives under the Section 106 framework. *See* 36 C.F.R. § 800.2(c)(3).

Plaintiffs' only evidence of a failure to consult the local government is an April 2018 letter from Takeshi Onaga, a newly elected Governor of Okinawa, claiming the Okinawa Prefectural Government was not consulted or notified and that it would have provided (unspecified) views

contrary to those presented in the Japanese EIS. *See* Mot. at 12, n. 3. However, Mr. Onaga was elected *after* Defendants completed the TIA process, and his letter was sent four years *after* the process was completed. The record demonstrates that the views of Okinawa's prior leadership were in fact considered.

Importantly, throughout this entire process, Defendants have been in direct consultation with the Japanese national government. Defendants' direct consultation with the Japanese government is reasonable; "the Okinawa dugong is Japan's cultural and historical property and therefore, Japan's judgment regarding how best to protect that property should be of great concern to [Defendants]." *Dugong II*, 543 F.Supp.2d at 1108. Of course, it is rarely the case that a single government entity can purport to represent the full panoply of views held by a country's entire population. Although the Japanese national government's position regarding the FRF may be in tension with or different from the views held by the Okinawa Prefectural government or the population of Okinawa, Defendants did receive the views of local government actors and agencies. Given the political complexity of Japan's internal political divisions on the matter, NHPA's Section 402 should be read to afford deference to Defendants' judgment of how to conduct a Section 402 consultation in a manner sensitive to Japan's sovereignty, diplomatic relations between Japan and the United States, and international norms.

In light of these considerations, it was not unreasonable for Defendants to engage in direct consultation only with the Japanese national government, and to consider the views of the local Okinawa province indirectly through the Japanese EIS public-and-comment and through the contacts made by Defendants' researchers with Okinawan cultural authorities and practitioners. Moreover, as above, Plaintiffs have not identified what information would have been obtained that might have led to the evaluation of additional potential adverse effects had Defendants engaged in direct (as opposed to indirect) consultation with local representatives.

5. Failure to Give Public Notice or Solicit Public Comment

Plaintiffs also criticize Defendants for failing to give public notice of their TIA process or to solicit public comment from the Japanese public. Section 402 does not create an express obligation for such notice-and-comment. Although Section 106 regulations require such a process

in the context of domestic undertakings, no such input is mandated by the Section 402 guidelines. It was not unreasonable for Defendants to refrain from doing so under the circumstances of this case. As discussed above, the Japanese government performed its own robust public notice-and-comment process in connection with its EIS. *See, e.g.*, 3032 (flow chart describing at what steps there were opportunities for public comment in Japanese EIS process, including public comment before and after the draft and final EIS); US 3062 (PowerPoint apparently summarizing local residents' opinions on draft EIS); US 3069 (chart apparently indicating over 700 public comments received); US 1218 (33-page English translation of the summary of public comments on EIS). That EIS is part of the record considered by Defendants.

Plaintiffs claim that this process was inadequate because the Japanese EIS did not assess the effects of the FRF on the dugong as a cultural resource. *See* Reply at 10. However, the Japanese EIS involves extensive discussion of the dugong and potential impacts of the FRF. *See, e.g.*, US 5015 (beginning of section summarizing surveys of dugong sightings); US 5027 (noting that dugongs have been designated as "national protected animals under the Act on Protection of Cultural Properties"); US 5108 (noting that one effect considered is on seaweed beds "which provide a feeding ground to dugongs"). Furthermore, the public comment submitted in connection with the Japanese EIS did, in fact, include extensive discussion of the FRF's potential impact on the dugong. *See* US 1238-41. Plaintiffs have not established what would have been gained had Defendants pursued their own, separate public notice-and-comment. *See Dugong II*, 543 F.Supp.2d at 1108 ("Duplicative, inconsistent efforts are not required.").

Plaintiffs have thus failed to demonstrate that Defendants' reliance on the public notice-and-comment undertaken by Japan's government was unreasonable under Section 402.

6. Failure to Inquire About Adverse Impact

Plaintiffs also argue that Defendants' consultation with academics and cultural figures through the Welch report was inadequate because they consulted those figures only regarding the cultural significance of the dugong, without asking their views on "the *effect* of the undertaking [i.e., FRF] on the property [i.e., dugong]." 54 U.S.C. § 307101(e) (emphasis added). It is true that the informants contacted by the consultants were told only that they would be interviewed

"concerning the role of the dugong in Okinawan culture" to "help the Marine Corps carry out its mission and future planning in Okinawa." US 3252. The outreach letter does not identify the FRF or state that the purpose was to understand "the effect" of the FRF on the Okinawa dugong. 54 U.S.C. § 307101(e). Arguably, that reflects a weakness in the TIA process.

However, standing alone, that weakness does not render Defendants' TIA process unreasonable under Section 402. The Section 402 TIA process does not necessarily require that *every* consultation address *both* the cultural significance of the monument *and* the expected effects. Indeed, certain interlocutors may have expertise on one aspect (cultural significance) but not the other (assessing the physiological or biological impact of the FRF). It was not necessarily unreasonable for the IARII consultants to speak with cultural experts about cultural significance, and then analyze separately the biological research to determine, scientifically, how the FRF would impact those cultural features. As Judge Patel noted, "an agency has some discretion in deciding who will be consulted, *to what extent*, and at precisely what time." *Dugong II*, 543 F.Supp.2d at 1106 (emphasis added). It was not unreasonable to limit the scope of consultation with certain parties to issues germane to their expertise or knowledge.[5]

Moreover, even if the IARII consultants did not specifically ask their interlocutors about the effects of the FRF, the Japanese public had an opportunity to comment through Japan's EIS about such effects, as discussed above. The record demonstrates that Defendants' analysis of the effects was based on a consideration of the information collected through both processes. Further, Defendants engaged in a full consultation with the Japanese government itself and considered the views of local agencies. The Court cannot conclude that the failure to specifically ask local cultural experts about the impacts of the FRF rendered the TIA process unreasonable or non-compliant under Section 402 in these circumstances.

[5] Plaintiffs cite only *Montana Wilderness Ass'n v. Fry*, 310 F.Supp.2d 1127, 1153 (D. Mont. 2004) as an example of inadequate consultation, but in that case the defendants failed to undertake *any* consultation at all. Here, the challenge is to the scope of consultation. Moreover, *Montana Wilderness* was a case under NHPA Section 106, for which the formally promulgated and binding regulations require consultation with Indian tribes regarding the effects of an undertaking. As noted, Section 106 regulations do not apply here, except by analogy.

7. Conclusion

Plaintiffs have not shown that Defendants' scoping of the consultation was unreasonable and violative of Section 402. Nor have Plaintiffs identified any new or additional material information that Defendants would have learned by consulting Plaintiffs or cultural practitioners directly. The Court **DENIES** Plaintiffs' motion for summary judgment and **GRANTS** Defendants' cross-motion for summary judgment with respect to Section 402 of the NHPA.

B. Was Defendants' Finding of "No Adverse Effect" on the Dugong Population "Arbitrary and Capricious"?

Plaintiffs' remaining challenges are brought directly under the APA to challenge Defendants' conclusions as arbitrary and capricious to the extent they rely on scientifically indefensible studies, fail to consider important aspects of the problem, or reach findings contrary to the evidence. Each issue is discussed below.

1. Were Defendants' Findings "Scientifically and Legally Defensible"?

Plaintiffs attack Defendants' reliance on the Japanese government's EIS despite statements by a few government consultants criticizing the Japanese EIS and recommending further study to come up with precise, scientifically-reliable estimates of the size of the total Okinawa dugong population in the affected area. Despite these criticisms, Defendants did not act unreasonably under these circumstances because they considered other sources of information about the intermittent and sporadic presence of Okinawa dugong in the affected FRF area. As explained below, that is sufficient under the arbitrary and capricious standard of review.

2. Internal Criticism

Plaintiffs rely on certain examples of internal criticism but, as explained below, these remarks are taken out of context.

First, Plaintiffs identify a March 2010 e-mail by Dr. Thomas Jefferson who stated that "[t]he quality of the EIA itself think [sic] it was extremely poorly-done and does not withstand scientific scrutiny in my opinion am happy to change the wording in the report to reflect this but as we discussed we need to do this in diplomatic fashion." US 4706. However, it is not clear to which specific aspect of the 1,600-page Japanese EIS Dr. Jefferson was referring. This stray

comment provides little insight about the nature of Dr. Jefferson's criticism and whether it is material in particular to Plaintiffs' complaint about the population studies, or otherwise undermines Defendants' conclusions.

Second, Plaintiffs claim that Defendants "concede" that "the data are not sufficient to establish population size, status, and viability" of the dugong and that "it would be beneficial for [the Government of Japan] to conduct new systematic surveys or modeling" to develop information about the Okinawa dugong population. US 10988, 10993. In fact, Defendants' complete findings state:

> The USMC has reviewed all available studies regarding the distribution of the Okinawa dugong in waters around Okinawa. Observations include at least one mother-calf pair, which indicates that reproduction is still occurring in the population. Estimates made over the past thirteen years of the Okinawa dugong population range between 3 to 50 individuals. The available data are sufficient to conclude that a remnant population of dugongs exists around Okinawa. However, the data are not sufficient to establish population size, status, and viability. In the immediate vicinity of the FRF, seagrass beds are found to the north at Kayo and south of the FRF, in Henoko Bay. As noted in Section 2.4, ***dugongs have been sighted in the vicinity of the FRF or FRF footprint only sporadically since June 2009***. During that time, steady and routine dugong activity has been documented off Kayo (north and east of the FRF), ***with only sporadic dugong activity observed directly in Henoko and Oura Bays*** (6/09, 4/12, 5/12, 6/1, 3/13, 5/13, and 11/13).

US 10988 (emphasis added).

Thus, although Defendants acknowledged the lack of scientifically reliable estimates about the total size of the Okinawa dugong population, they had sufficient information about the relatively sporadic and intermittent presence of dugong in the FRF-affected areas and those immediately adjacent (Henoko and Oura Bays and Kayo). Further, with respect to their statement that "it would be beneficial" if Japan conducted further studies, Plaintiffs ignore the immediately subsequent statement that: "Notwithstanding the absence of recent *total* population data, *we do have current and valid population data for Henoko and Oura bays*." Findings at 17 (emphasis added). Thus, Plaintiffs' claim that no data was available about the dugong population in the FRF-area is incorrect.

Third, Plaintiffs identify a July 28, 2011 e-mail from Morgan Richie, a Marine Resources

Specialist at the Naval Facilities Engineering Command—Pacific (Navfac-Pac) who co-authored the 2011-2012 Survey of Marine Mammals in Okinawa (SuMMO), which discusses the proposed scope of a project designed to monitor cetacean and dugong presence in the Henoko and Oura Bays. *See* US 8095. Richie states that "[a]s background . . . in the Fall of 2010, Navfac-Pac provided an estimate on placing 3 passive acoustic monitoring devices in the Henoko and Oura Bay area in order to monitor for dugongs. However, after performing additional analysis since that time, it became clear to us that monitoring for a population of dugongs ***with such extremely low density*** would require techniques in addition to the 3 PAM devices as well as increased monitoring effort overall." *Id.* (emphasis added). She thereafter criticized the current proposal as providing "a greater understanding of the presence . . . of cetaceans," but only "opportunistic detections of dugongs." *Id.* She also stated that the data "will have a high likelihood of not being able to ***conclusively*** tell us if, where, when, or how dugongs are using seagrass beds near Henoko and Oura Bay," and that she did not recommend using the resulting data "to make legally defensible claims regarding the presence or absence of dugongs." *Id*. (emphasis added). In response, Dr. Sue Goodfellow, the supervisor of the project, stated that "[t]he USMC sees no need for the more elaborate SOW that NAVFACPAC is now proposing," and noted that the lack of resolution was delaying execution of the survey contract and funds might be lost until the following budget cycle if not used soon. US 8094. In line with Richie's prediction, the SuMMO final report states that "[i]t is not possible to say anything ***definitive*** about densities of dugongs," because the study did not involve an "effective dugong monitoring program." AR 9269 (emphasis added).

Although Richie stated a more thorough method was required to provide "conclusive" and "definitive" information about dugong density, that does not render Defendants' ultimate conclusions arbitrary and capricious. Indeed, as Richie made clear in the e-mail, the need for more rigorous methods was caused by the very low density of dugong in the FRF area itself. *See* US 9269. In other words, the available data confirmed a very low density of dugong in the FRF area. *See, e.g.*, US 10979(citing data revealing intermittent observance in Oura Bay in several months between September 2010 and November 2013 and in the seagrass beds in the FRF-area

between June 2009 and November 2013); US 10984(citing Japan's EIS surveys reporting sightings of dugong); US 5015-19 (citing surveys reporting sporadic sightings in Okinawa waters, analysis of feeding trails, and so on); USREF 1580, 2064 (external academic literature re: dugong sightings and feeding trails around Okinawa). Defendants' conclusion of low dugong presence in the FRF area was not unreasonable in light of the available data. *Cf. Env. Protection Info. Ctr. v. U.S. Forest Serv.*, 451 F.3d 1005, 1018 (9th Cir. 2006) (under National Forest Protection Act, which imposes certain substantive requirements, "monitoring difficulties [of a species' presence in a particular area] do not render a habitat-based analysis [of the species' viability in that area] unreasonable, so long as the analysis uses all the scientific data currently available").

That low density, in turn, was the basis for Defendants' conclusion that the FRF was unlikely to have an adverse effect (*e.g.*, because of the low probability of vessel impact). Indeed, this close connection between the low density in the FRF-area and Defendants' conclusion confirms why it was not unreasonable to refrain from a more detailed scientific study. Defendants recognized there was a lack of reliable global population studies. *See* US 9243 ("There are many recent records of sightings, strandings, and captures (both direct and indirect), although by all accounts the species is now badly depleted and considered endangered in Okinawa. There are no statistically-defensible estimates of abundance for the species around Okinawa, but six individuals were observed in a single group in 1999."). But Section 402 did not require Defendants to determine the total global Okinawa dugong population; it only required them to take into account the impacts on the dugong in the FRF-area based on data sufficient to show their relative density in the affected area and resulting potential impact.

This situation is very much unlike the case cited by Plaintiffs, *Bonnichsen v. United States*, 217 F.Supp.2d 1116, 1163-64 (D. Or. 2002), *aff'd*, 357 F.3d 962 (9th Cir. 2004), *amended by* 367 F.3d 864 (9th Cir. 2004). There, in a dispute under Section 106 of the NHPA, the defendant was required to consider the potential adverse effects of burying a site where culturally significant human remains were found. An Army Corps of Engineers scientist had noted that "the erosion at the site was 'not as serious as that occurring at many other Corps of Engineers Reservoirs,'" but advised "'cautio[n] about long term deleterious effects of engineering site protection measures.'"

Id. Nevertheless, "the project proceeded without significant study to determine the characteristics of the site, including what archaeological resources might exist, and there [was] little evidence that alternative methods of erosion[] control that might mitigate potential data loss were seriously considered." *Id.* at 1163-64.

In contrast, here, Richie did not warn about potential adverse effects that went unstudied, but rather, described what would be needed for a scientifically defensible population study of the dugong in light of their very low density. There is no reason to construe Richie's criticisms (premised on the difficulty of a low density population) to suggest that the local dugong population was even greater than believed and thus at greater risk of negative encounters with FRF construction or operational activities. Plaintiffs do not suggest that a more detailed study would have revealed that the dugongs in fact traversed the area more than "intermittently" or feed more than "occasionally." *See* US 10979. Defendants had sufficient material information on which to base their analysis. Defendants adequately explained why existing data was sufficient for their purposes. *See City of Carmel-By-The-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142, 1151 (9th Cir. 1997) (NEPA only requires "a 'reasonably thorough' discussion of the environmental consequences in question, not unanimity of opinion, expert or otherwise"); *see N. Plains Res. Council, Inc. v. Surface Transp. Bd.*, 668 F.3d 1067, 1078 (9th Cir. 2011) (holding that an agency is "afforded deference in choosing its scientific method for modeling data" even under NEPA's more stringent "hard look" analysis); *Alaska Survival v. Surface Transp. Bd.*, 705 F.3d 1073, 1088 (9th Cir. 2013) (under NEPA "hard look," "[i]t is not the role of th[e] court to decide whether an [environmental impact study] is based on the best scientific methodology available" (citation omitted)).

3. Full Range of Impacts

Plaintiffs also argue that Defendants failed to consider the full range of impacts of the FRF on the dugong including "population fragmentation, the disruption of travel routes, and the loss of habitat that may be required in the future to sustain a viable population, which would be larger than the present population." Mot. at 19; *see Turtle Island Restoration*, 878 F.3d at 732 (agency action may be arbitrary and capricious if the agency "entirely fail[s] to consider an important

aspect of the problem"). Instead, Defendants allegedly "limited [their] inquiry into the possible impacts of the FRF on the dugong to a list of potential impacts identified by this Court before [Defendants] had undertaken any inquiry at all." *Id*; see also US 10980. Judge Patel had identified potential effects to include "physical destruction of the Okinawa dugong resulting from contamination of seagrass feeding grounds and collisions with boats and vessels, as well as long-term immune and reproductive damage resulting from exposure to toxins and acoustic pollution." *Dugong II*, 543 F.Supp.2d at 1101.

The Court agrees that Judge Patel did not purport to offer an exhaustive list of potential impacts on the dugong. Nevertheless, it is not accurate to state that Defendants simply limited their study to the impacts identified by Judge Patel. Rather, the Welch 2010 report identified six general threats to the dugong as a species: hunting, bycatch/incidental catch (including in gill nets), vessel traffic, acoustic disturbance, chemical pollution, and habitat loss/destruction. US 4180-83. It opined that threats from military activities could include pollution, habitat destruction/alteration, and vessel collisions. US 4183. The Jefferson report identified the same six general threats and noted that the primary threats were bycatch and habitat destruction/alteration. US 3369-70. Notably, these are the same threats identified by Plaintiffs' expert, Dr. Hines. *See* Hines Decl. ¶¶ 30-34 (listing noise and acoustic pollution, destruction and degradation of seagrass beds, contaminant pollution, and increased vessel activity as potential threats to the dugong).

Defendants properly focused on and discussed each of the threats identified by all the relevant experts, both their own and Plaintiffs'. The Japanese EIS, which Defendants relied upon, considered the impact of ship routes, including the possibility of incidental capture in gill nets if dugongs entered the Bay, effects on water quality, and effects on habitat by harm to seabeds. *See* US 6141-47. Defendants considered those issues as well. US 10988-93. It was not unreasonable for Defendants to examine and consider the threats specifically identified by three experts as the most significant to the dugong possibly exacerbated by the FRF.

Although Plaintiffs suggest the study should have also considered population fragmentation, none of the experts (including Plaintiffs' own expert, Dr. Hines) identified that

issue as a threat to the Okinawa dugong. Plaintiffs also claim Defendants did not consider the disruption of dugong travel routes, but Defendants considered whether ship routes and aircraft noise would alter dugong "behavior." Finally, the Welch report explicitly notes that "[r]egardless of whether [seabeds in Henoko and Oura Bay] are currently being used by dugongs, destruction of seagrass beds along Henoko Bay will limit areas that could provide habitat in the event of recovery and increase in the current dugong populations." US 4156. Thus, the issue of how the FRF might impede future recovery efforts (if not harm the current population) was before Defendants.

In short, Plaintiffs have not shown a failure to consider an important aspect of the problem. The NHPA 402 does not identify particular issues that must be considered, and the agency's identification of the scope of issues—based on the threats to the dugong identified in the Welch and Jefferson reports, which were consistent with the threats identified by Plaintiffs' expert Dr. Hines—was reasonable.

C. Whether "No Adverse Effect" Is Supported By Record

Finally, Plaintiffs challenge Defendants' conclusion of no adverse effect on the merits, arguing that the record shows the FRF *is* likely to adversely impact the dugong. They claim that Defendants' conclusion runs counter to the 2010 Welch Report. However, the Welch report identified *potential* or *possible* effects without any attempt to quantify the likelihood they would materialize. As explained above, the Japanese EIS, like Defendants' own findings, concluded that because of the very low presence of dugong in the FRF-area, the potential adverse effects identified in part by the Welch report were unlikely to materialize in practice. That conclusion, though debatable, was based on a reasonable interpretation of the data, and was not arbitrary and capricious. *See Protect Our Comtys. Found. v. Jewell*, 825 F.3d 571, 583 (9th Cir. 2016) ("When the agency's determination is founded on reasonable inferences from scientific data, a reviewing court will not 'substitute its judgment for that of the agency.'" (citation omitted)).[6]

[6] An August 2010 bi-lateral expert study group that examined the FRF which stated that "the impact on animal and plant habitat remains to be assessed," US 7311, does not support Plaintiffs' claim. As explained above, *supra* at 8, this language refers to the alternative "I" runway plan, not the "V" runway plan that Defendants adopted and for which effects on animal habitat *were*

Moreover, Defendants' finding of "no adverse effect" was based in part on the extensive mitigation measures that will be adopted, including, *inter alia*:

- standoff and speed limits for vessel traffic, US 10989, 10992;
- measures to prevent red-soil runoff such as the installation of contamination prevention covers and other management practices, US 10990, 10992;
- measures intended to minimize acoustic impact such as using pile driving methods that generate the least amount of noise, monitoring for any changes in dugong activity and responding accordingly, using weak strikes at the start of activity and gradually increasing force in order not to startle dugong, and halting activity if dugong are observed approaching the construction zone, US 10991, 10993; and,
- measures to reduce the impact of lighting at night such as refraining from night-time construction and using lighting cones to direct lighting up and away from the water, US 10991, 10993.

Far from undermining the conclusion of "no adverse effects," these mitigation measures show that the Section 402 achieved its purpose of having the agency take into consideration what steps could be taken to avoid or mitigate any potential harm to the dugong. *See* 54 U.S.C. § 307101(e) (the TIA process is undertaken "for purposes of avoiding or mitigating any adverse effect"). The extensive mitigation measures combined with infrequent dugong presence bolster the reasonableness of the conclusion that an adverse effect is unlikely to manifest.

IV. CONCLUSION

The scoping of Defendants' TIA process was not unreasonable: they commissioned a biological report and a cultural report, the latter of which involved outreach to cultural experts, some of whom had knowledge of ritual practices and the views of cultural practitioners. Defendants also relied on the Japanese EIS, which involved a public outreach process in which Plaintiffs and others had an opportunity to participate, and in which the Okinawa Prefectural Government submitted extensive comments. Defendants also considered Plaintiffs' views as

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assessed. *See* US 7309. In any case, this bilateral study was not the only one performed and Defendants had other data at their disposal to assess the impact on the dugong.

presented in this litigation. Defendants engaged in direct consultation with the Japanese national government. While Defendants' outreach could and perhaps should have been broader to individuals, *inter alia*, Plaintiffs, the Court cannot say Defendants violated to procedural requirements of Section 402. On the facts of this case, defendants discharged their obligations to "take into account" potential adverse effects of the FRF on the Okinawa dugong under Section 402 of the NHPA.

Furthermore, Defendants' conclusions of no adverse effect were not arbitrary or capricious. They had sufficient scientific information upon which to conclude there was a very low density of dugong in the Oura and Henoko Bays. They reasonably concluded it was unlikely that events related to the FRF would harm the dugong, particularly in light of the particular details of their construction and operational plans. Their conclusion of no adverse effect was not arbitrary and capricious.

The Court is aware of the high stakes at issue. The Court understands the concern of Plaintiffs and those of affected citizens about the potential harm to the endangered dugongs of Okinawa. But Section 402, while requiring the U.S. government to take account the effect of its undertaking in constructing the FRF, offers a limited scope of judicial review. Under that limited scope of review, the efforts taken by Defendants to comply with Section 402, including implementation of mitigating measures, fulfill the requirements of Section 402 and support a finding of no adverse effect.

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For these reasons stated above, the Court **DENIES** Plaintiffs' motion for summary judgment and **GRANTS** Defendants' cross-motion for summary judgment. The Court's holding renders the question of remedies moot.

This order disposes of Docket Nos. 220 and 221. The Clerk is directed to enter Judgment for Defendants and to close the case.

IT IS SO ORDERED.

Dated: August 1, 2018

EDWARD M. CHEN
United States District Judge

United States District Court
Northern District of California