

APPENDIX L

# Agency Consultation and Coordination Correspondence

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## **L-1: Endangered Species Act Section 7 Consultation**

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National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

August 12, 2011

Reply to Attn of:

AS01

U.S. Fish and Wildlife Service  
Mr. Rick Farris  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003

**SUBJECT:** Invitation for Informal Consultation on Plant and Wildlife Surveys to Support the Environmental Impact Statement for the Demolition and Cleanup Activities at Santa Susana Field Laboratory, Ventura County, California

Dear Mr. Farris:

The National Aeronautics and Space Administration (NASA) is proposing the remediation of soils and groundwater and the demolition of test stands and ancillary structures on the NASA-administered portion of the Santa Susana Field Laboratory (SSFL). To analyze the potential environmental impacts of these activities, NASA is preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations, the NASA Procedural Requirements (NPR) for Implementing NEPA, and Executive Order (EO) 12114.

NASA is currently conducting rare plant and wildlife surveys at SSFL. Those surveys should be completed by late September 2011, and we would like a chance to meet with personnel from your office in October or November to discuss our findings and the EIS. We would also welcome the opportunity to discuss additional information that you may provide us about the biological systems at SSFL.

### **SSFL Site Background**

The SSFL site is 2,850 acres in Ventura County, California, approximately 7 miles northwest of Canoga Park and 30 miles northwest of downtown Los Angeles. SSFL is composed of four areas known as Areas I, II, III, and IV and two unnumbered areas known as the "undeveloped land." NASA administers 41.7 acres within Area I and all 409.5 acres of Area II. The Boeing Company manages the remaining property within Areas I, III, and IV and the two undeveloped areas. The attachment shows the project area.

Since the mid-1950s, when the two Federally owned areas were owned by the U.S. Air Force, this site has been used for developing and testing rocket engines. Four test stand complexes—Alfa, Bravo, Coca, and Delta—were constructed in Area II between 1954 and

1957. Area II and the Liquid Oxygen (LOX) Plant portion of Area I were acquired by NASA from the U.S. Air Force in the 1970s.

The NASA-administered areas of SSFL also contain biological resources outside of the rocket development areas. SSFL is near the crest of the Simi Hills, which are part of the Santa Monica Mountains running east-west across Southern California. The diverse terrain consists of ridges, canyons, and sandstone rock outcrops. NASA has conducted several surveys to identify biological resources within its portion of SSFL. As a result, NASA has identified special-status plant and animal species occurring on its property.

Previous environmental sampling on the NASA-administered property indicates that metals, dioxins, polychlorinated biphenyls (PCBs), volatile organics, and semivolatile organics are present in the soils and upper groundwater (known as the Surficial Media Operable Unit). Volatile organics, metals, and semivolatile organics also are present in the deeper groundwater (known as the Chatsworth Formation Operable Unit).

### **Environmental Commitments**

Rocket engine testing has been discontinued at these sites and the property has been excessed to the General Services Administration (GSA). GSA conditionally has accepted the Report of Excess pending: (1) NASA's certification that action necessary to protect human health and the environment with respect to hazardous substances on the property has been taken or receipt of the U.S. Environmental Protection Agency's (EPA's) written concurrence that an approved and installed remedial design is operating properly and successfully; OR (2) the Governor's concurrence of the suitability of the property for transfer per Comprehensive Environmental Response, Compensation, and Liability Act Section 120(h)(3)(C).

In 2007, a Consent Order among NASA, Boeing, U.S. Department of Energy, and Department of Toxic Substances Control (DTSC) was signed addressing demolition of certain infrastructure and environmental cleanup of SSFL. NASA entered into an Administrative Order on Consent (AOC) for Remedial Action with DTSC on December 6, 2010, "to further define and make more specific NASA's obligations with respect to the cleanup of soils at the Site." On the basis of the 2010 AOC, NASA is required to complete a Federal environmental review pursuant to NEPA. An EIS is being prepared by NASA to include demolition of site infrastructure, soil cleanup and groundwater remediation within Area II and a portion of Area I (LOX Plant) of SSFL.

As part of the environmental review process, certain studies are being completed to characterize the existing conditions and to provide information for the analysis and consultation. These include surveys for wildlife, critical habitat, rare plants, wetlands, and archaeological resources. The findings of these studies will be incorporated into the EIS.

### **Environmental Analysis**

NASA will submit a Biological Assessment (BA) based on the existing ecological resource surveys and the data collected during the biological resources studies. The BA will be prepared and submitted to the USFWS to support Section 7 Consultation. Best management practices, such as seasonal restrictions on the work, will be reviewed.

CH2M HILL is NASA's contractor for this work and will work with NASA and the resource agencies to establish appropriate avoidance and minimization measures to reduce the impacts of the proposed action on known or potentially known sensitive habitats. In the event suitable habitat for listed species is identified in an inaccessible area of the proposed project area, listed species will be assumed to be present. The BA will address effects of the proposed action on federally listed threatened or endangered species known to occur or to have the potential to occur on the SSFL project area, including but not limited to, the following:

- Braunton's milk vetch (*Astragalus brauntonii*)
- *Dudleya* spp.
- Santa Susana tarplant (*Deinandra minthornii*)
- Quino checkerspot butterfly (*Euphydryas editha* ssp. *quino*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- Vernal pool fairy shrimp (*Branchinecta lynchi*)
- California red-legged frog (*Rana aurora* ssp. *draytonii*)
- Least Bell's vireo (*Vireo bellii* ssp. *pusillus*)

In addition, potential Quino checkerspot butterfly habitat occurs on the site. The BA will include a focused survey of the NASA property for host plants that will identify the extent of the butterfly's preferred habitat.

We look forward to working cooperatively with your agency to conduct these evaluations. If you have questions regarding these plans or to set up a meeting, please feel free to contact me at 256- 544-0662 or Amy Keith at 256-544-7434.

Sincerely,



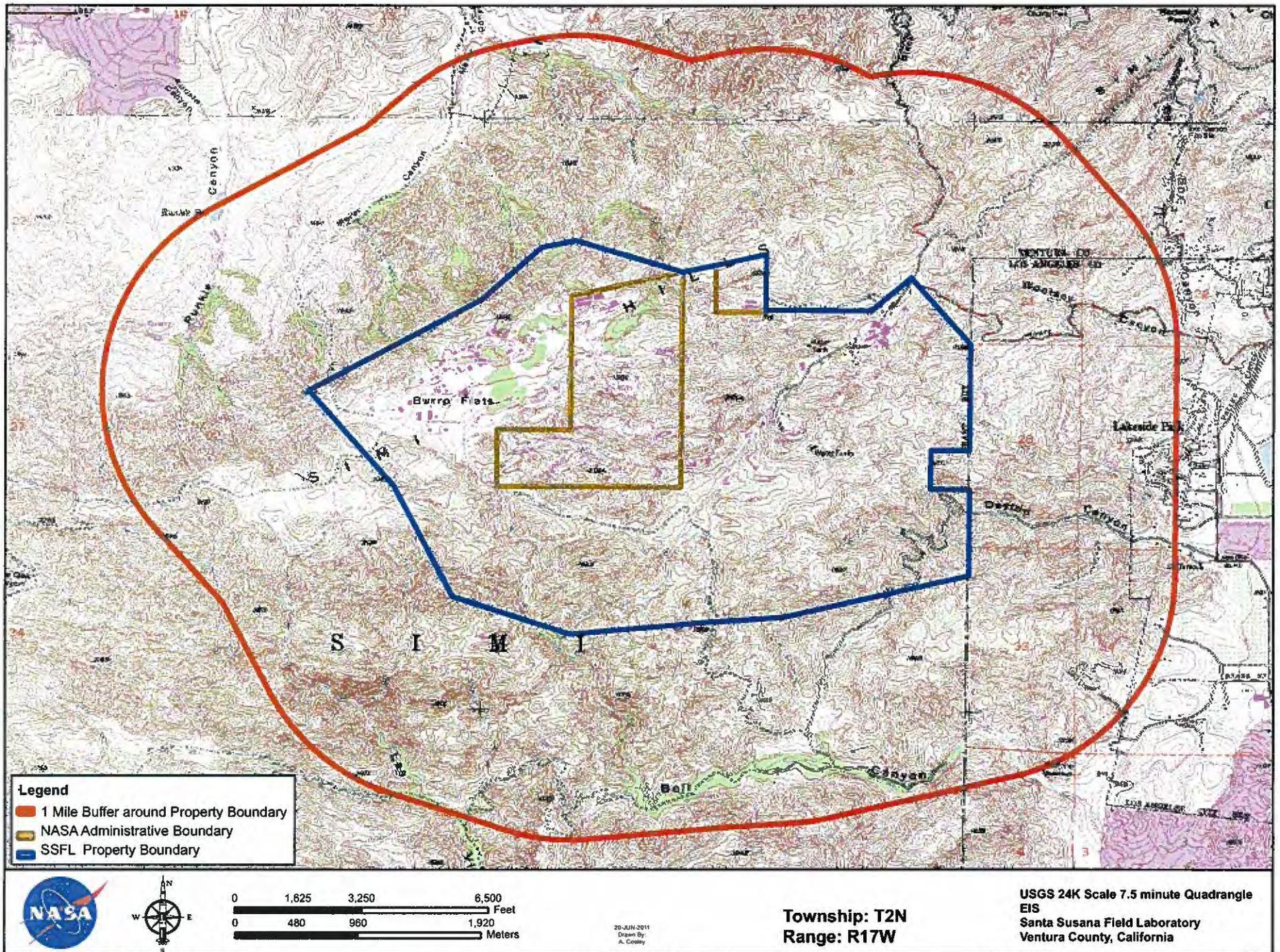
Allen Elliott  
SSFL Program Director

Enclosure – Site Map

cc:

AS10/Amy Keith  
CH2M HILL/Beth Vaughan  
CH2M HILL/Leslie Tice

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Map Document ID: NASA-SSFL/Imager/EIS\_2011/USGS\_24k\_auro

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National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

August 12, 2011

Reply to Attn of:

AS01

U.S. Army Corps of Engineers  
Mr. David Castanon, Division Chief  
USACE Regulatory Division, Los Angeles District  
915 Wilshire Blvd.  
Los Angeles, CA 90017-3401

**SUBJECT:** Invitation for Informal Consultation on Plant and Wildlife Surveys to Support the Environmental Impact Statement for the Demolition and Cleanup Activities at Santa Susana Field Laboratory, Ventura County, California

Dear Mr. Castanon:

The National Aeronautics and Space Administration (NASA) is proposing the remediation of soils and groundwater and the demolition of test stands and ancillary structures on the NASA-administered portion of the Santa Susana Field Laboratory (SSFL). To analyze the potential environmental impacts of these activities, NASA is preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations, the NASA Procedural Requirements (NPR) for Implementing NEPA, and Executive Order (EO) 12114.

NASA is currently conducting rare plant and wildlife surveys at SSFL. Those surveys should be completed by late September 2011, and we plan to meet with personnel from the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) to discuss our findings and the EIS and to provide those agencies an opportunity to provide additional information they may have about the biological systems at SSFL. We also plan to conduct wetlands delineation during the winter of 2011-12 and would like to coordinate our efforts with your office.

### **SSFL Site Background**

The SSFL site is 2,850 acres in Ventura County, California, approximately 7 miles northwest of Canoga Park and 30 miles northwest of downtown Los Angeles. SSFL is composed of four areas known as Areas I, II, III, and IV and two unnumbered areas known as the "undeveloped land." NASA administers 41.7 acres within Area I and all 409.5 acres of Area II. The Boeing Company manages the remaining property within Areas I, III, and IV and the two undeveloped areas. The attachment shows the project area.

Since the mid-1950s, when the two Federally owned areas were owned by the U.S. Air Force, this site has been used for developing and testing rocket engines. Four test stand complexes—Alfa, Bravo, Coca, and Delta—were constructed in Area II between 1954 and 1957. Area II and the Liquid Oxygen (LOX) Plant portion of Area I were acquired by NASA from the U.S. Air Force in the 1970s.

The NASA-administered areas of SSFL also contain biological resources outside of the rocket development areas. SSFL is near the crest of the Simi Hills, which are part of the Santa Monica Mountains running east-west across Southern California. The diverse terrain consists of ridges, canyons, and sandstone rock outcrops. NASA has conducted several surveys to identify biological resources within its portion of SSFL. As a result, NASA has identified special-status plant and animal species occurring on its property.

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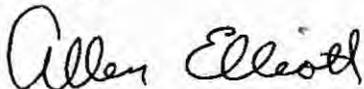
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We look forward to working cooperatively with your agency to conduct these evaluations. If you have questions regarding these plans, please feel free to contact me at 256- 544-0662 or Amy Keith at 256-544-7434.

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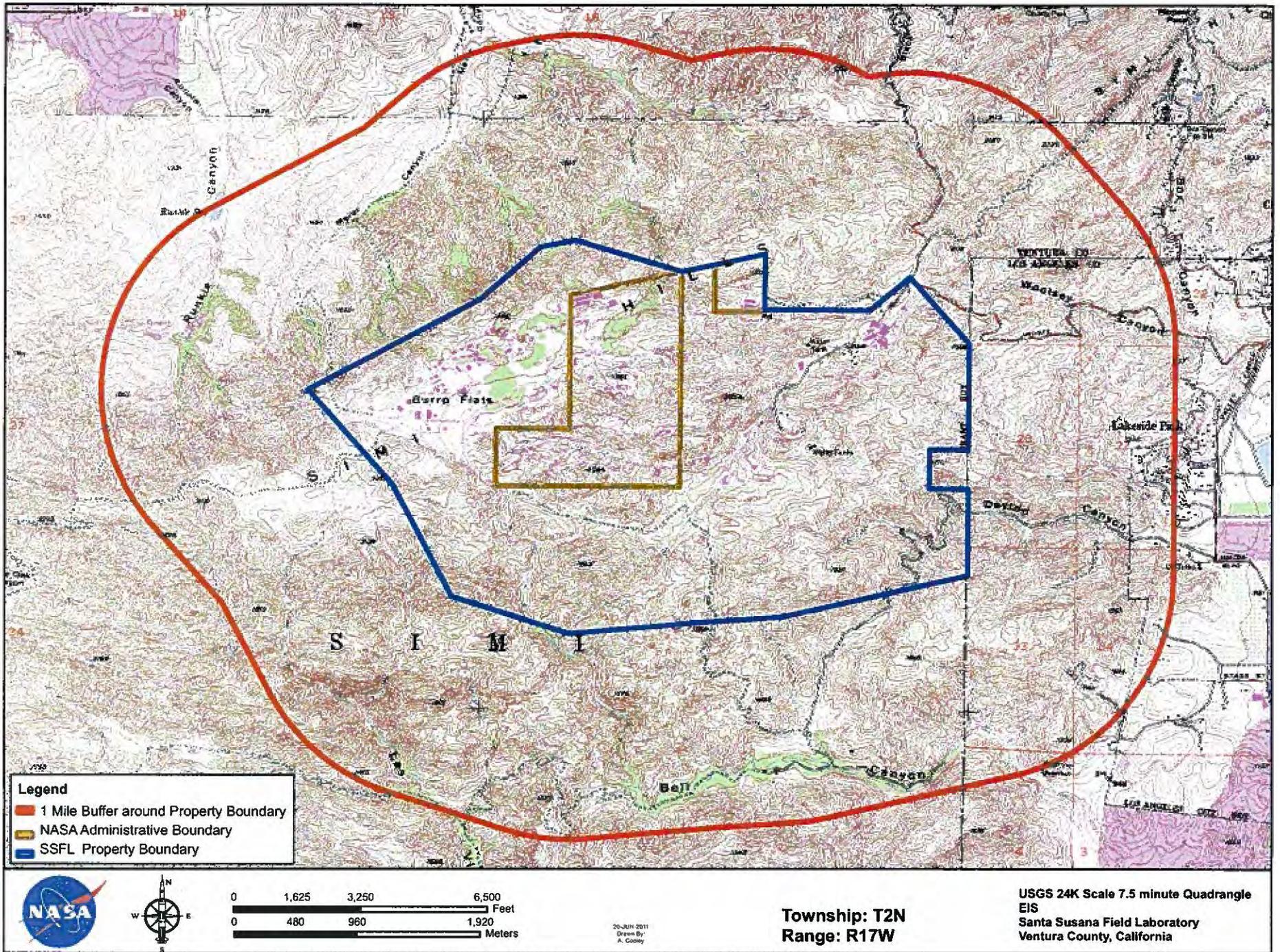
Allen Elliott  
SSFL Program Director

Enclosure – Site Map

cc:

AS10/Amy Keith  
CH2M HILL/Beth Vaughan  
CH2M HILL/Leslie Tice

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National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, AL 35812

August 12, 2011

Reply to Attn of:

AS01

Ms. Mary E. Meyer  
Staff Environmental Scientist  
South Coast Region  
Department of Fish and Game  
226 West Ojai Avenue Suite 101  
PMB: 501  
Ojai, California 93023

**SUBJECT:** Invitation for Informal Consultation on Plant and Wildlife Surveys to Support the Environmental Impact Statement for the Demolition and Cleanup Activities at Santa Susana Field Laboratory, Ventura County, California

Dear Ms. Meyer:

The National Aeronautics and Space Administration (NASA) is proposing the remediation of soils and groundwater and the demolition of test stands and ancillary structures on the NASA-administered portion of the Santa Susana Field Laboratory (SSFL). To analyze the potential environmental impacts of these activities, NASA is preparing an Environmental Impact Statement (EIS) in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) implementing regulations, the NASA Procedural Requirements (NPR) for Implementing NEPA, and Executive Order (EO) 12114.

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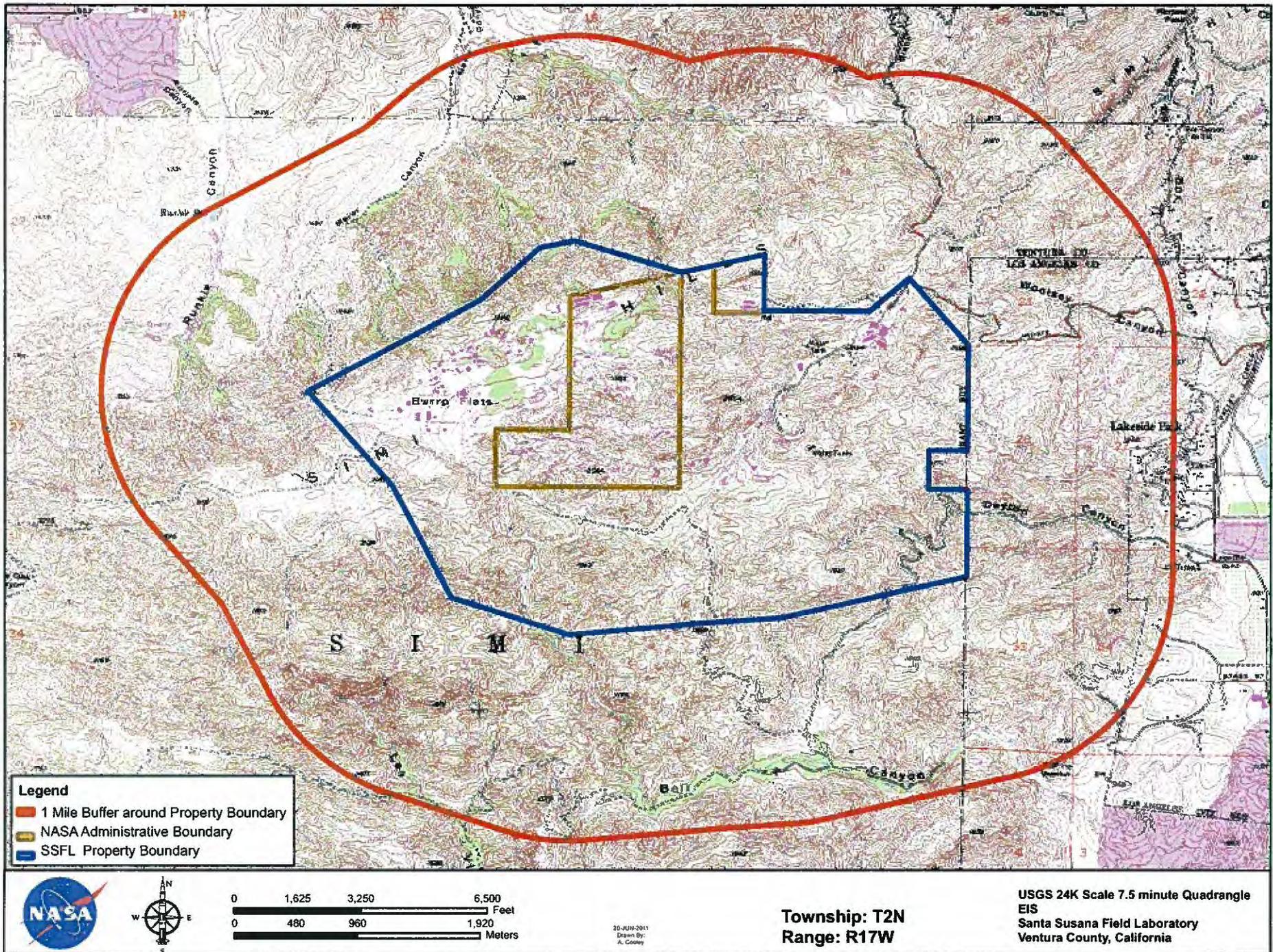
Allen Elliott  
SSFL Program Director

Enclosure – Site Map

cc:

AS10/Amy Keith  
CH2M HILL/Beth Vaughan  
CH2M HILL/Leslie Tice

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Map Document © NASA/SSFL/Map/EIS\_2011/USGS\_24k.avr

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003



IN REPLY REFER TO:  
81440-2011-CPA-0163

September 15, 2011

Allen Elliott  
Marshall Space Flight Center  
AS 01, Building 4494  
Huntsville, Alabama 95812

**Subject:** Environmental Impact Statement Scoping Comments for the National Aeronautics and Space Administration's Environmental Cleanup of the Santa Susana Field Lab, Ventura County, California

Dear Mr. Elliott:

We are responding to the notice of intent to conduct scoping and prepare an Environmental Impact Statement (EIS) for Demolition and Environmental Cleanup Activities for the National Aeronautics and Space Administration (NASA) administered portion of the Santa Susana Field Laboratory (SSFL), posted in the Federal Register on July 6, 2011.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act and its implementing regulations prohibit the taking of any federally listed endangered or threatened species. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species. Exemptions to the prohibitions against take may be obtained through coordination with the Service in two ways: through interagency consultations for projects with Federal involvement pursuant to section 7 of the Act or through the issuance of an incidental take permit under section 10(a)(1)(B) of the Act.

The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the MBTA has no provision for allowing take, we recognize that some birds may be killed even if all reasonable measures to avoid it are implemented. The Service's Division of Law Enforcement carries out its mission to

Allen Elliott

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protect migratory birds not only through investigations and enforcement, but also through fostering relationships with individuals and industries that actively seek to eliminate their impacts on migratory birds. Although individuals or companies cannot be absolved from liability under the MBTA, if they work with the Service to minimize their impact, the Division of Law Enforcement and Department of Justice have used enforcement and prosecutorial discretion in the past regarding individuals or companies who have made good faith efforts to avoid the take of migratory birds.

The federally listed species presented below have the potential to occur within SSFL and associated undeveloped areas:

- Braunton's milkvetch (*Astragalus brauntonii*), Endangered, designated critical habitat onsite;
- Lyon's pentachaeta (*Pentachaeta lyonii*), Endangered;
- Riverside fairy shrimp (*Streptocephalus woottoni*), Endangered;
- Least Bell's Vireo (*Vireo bellii pusillus*), Endangered;
- Quino checkerspot butterfly (*Euphydryas editha quino*), Endangered;
- Coastal California gnatcatcher (*Polioptila californica californica*), Threatened;
- California red-legged frog (*Rana draytonii*), Threatened, designated critical habitat onsite;
- Vernal pool fairy shrimp (*Branchinecta lynchi*), Threatened;
- Spreading navarretia (*Navarretia fossalis*), Threatened;
- California Orcutt grass (*Orcuttia californica*), Threatened;
- Conejo dudleya (*Dudleya abramsii* subsp. *parva* [=*D. parva*]), Threatened;
- Santa Monica Mountains live-forever (*D. cymosa* subsp. *ovatifolia* [inclusive of *D. cymosa* subsp. *agourensis*]), Threatened; and
- Marcescent dudleya (*D. cymosa* subsp. *marcescens*), Threatened.

The EIS should include a description of the potential for listed species and critical habitats to be present within NASA's portion of the SSFL, as well as a description of how these species and habitats may be impacted by the proposed demolition and cleanup activities. We would like to stress the importance of early coordination between NASA and the Service during the planning phase for demolition and cleanup activities. As described above, it is NASA's responsibility under the Act to initiate consultation with the Service to analyze the effects of the proposed project on federally listed species. Early coordination would allow NASA and the Service to identify measures that will minimize the effect of the cleanup on federally listed species, and to ensure adequate time for both parties to complete the consultation process.

In addition to addressing impacts to endangered and threatened species, the EIS should also identify any potential adverse effects to migratory birds, which are protected under the MBTA. Of particular interest to the Service is identifying whether any of the structures slated for demolition provide nesting habitat for migratory birds. The Service is available to discuss measures for minimizing impacts, such as scheduling the timing of demolition to occur outside

Allen Elliott

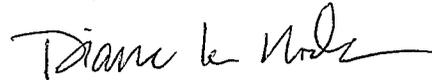
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season in order to avoid killing or injuring eggs, juvenile, or adult birds that are utilizing the derelict structures.

Because NASA, Boeing and the Department of Energy (DOE) are proceeding with cleanup planning and implementation for their respective areas of SSFL somewhat independently from each other, the staff time required by the Service to track progress and provide information about compliance with laws protecting federally listed species is unusually high. The Service is interested in engaging with NASA to provide guidance on evaluating risk to federally listed species and migratory birds to ensure that the project actions and eventual remedy are protective of Service trust resources. We request a meeting or conference call with NASA to discuss how to efficiently coordinate with you and the other involved agencies during the cleanup of this site.

We appreciate the opportunity to provide scoping comments for NASA's EIR. If you have questions about these comments, please contact Jenny Marek of our staff at (805) 644-1766 ext. 325 or by email at [Jenny\\_Marek@fws.gov](mailto:Jenny_Marek@fws.gov).

Sincerely,



Diane K. Noda  
Field Supervisor

Cc:

Shawn Alam, U.S. Department of the Interior  
Mary Meyer, California Department of Fish and Game

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MEETING SUMMARY

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## Santa Susana Field Laboratory–EIS

### NASA, USFWS, and CDFG Coordination Meeting

ATTENDEES: Amy Keith/NASA Mary Meyers/CDFG  
 Jeremiah Kolb/NASA Gary Santolo/CH2M HILL  
 Jenny Marek/USFWS Leslie Tice/CH2M HILL

COPIES: Allen Elliott/NASA  
 Tina Norwood/NASA  
 Beth Vaughan/CH2M HILL

FROM: CH2M HILL

DATE: December 1, 2011

ATTACHMENT: USFWS-CDFG\_Information Packet\_Dec2011.PDF

#### Meeting Objectives

- Initiate informal consultation about the Santa Susana Field Laboratory (SSFL) Environmental Impact Statement (EIS) and develop a dialogue and plan for successfully completing Section 7 activities associated with the NASA EIS.
- Review survey findings, status of the analysis, and schedule for completing Section 7 compliance.
- Add to the schedule when the appropriate time is to initiate formal Section 7 consultation.
- Jenny Marek and Mary Meyers both asked to get a better understanding of how the NASA EIS relates to other activities on SSFL by NASA, Boeing, U.S. Department of Energy (DOE), and the State of California Department of Toxic Substances Control (DTSC).

#### Project Overview

Leslie Tice provided a project overview including a description of the NASA-administered property at SSFL, a review of the proposed demolition and environmental cleanup activities including the four action alternatives, and the NEPA triggers for the project. Leslie also reviewed the project schedule including completed and ongoing scoping and impact analysis activities, the upcoming wetlands delineation and report, the Quino checkerspot butterfly habitat survey, and the Biological Assessment (BA). The Draft EIS currently is scheduled to be released for public review in the summer of 2012 and NASA's goal is to finalize the EIS by the end of 2012, with a Record of Decision signed in early 2013. With this, NASA is looking to receive a Biological Opinion (BO) from USFWS about the time that the EIS is finalized.

#### Survey Overview and Findings Discussion

Gary Santolo discussed the methodology, schedule, and findings of past biological surveys on the NASA property including habitat and wildlife surveys and protocol-level rare plant surveys. This overview is provided in the attached meeting Informational Packet. Gary also discussed remaining surveys to be completed, including a wetlands delineation scheduled for the first week of January 2012 and a Quino checkerspot butterfly habitat survey scheduled for the spring of 2012.

Tarja Sagar/NPS was involved in the rare plant identifications and Dr. Dick Arnold will conduct the butterfly survey.

Gary confirmed that no California Red Legged Frogs (CRLFs) have been identified during the surveys. Jenny asked if a CRLF habitat survey will be completed since no CRLF-specific surveys have been conducted at SSFL. Gary

suggested that this be completed during the wetlands delineation. This would be a good piece of information to identify if any additional surveys would be needed. Jeremiah Kolb shared the CRLF survey completed by DOE.

Gary also confirmed that opportunistic dipnet sampling in lieu of protocol-level survey would occur during the wetlands delineation to look for two species of sensitive fairy shrimp. Jenny agreed that protocol-level fairy shrimp surveys are not necessary at this time because these areas are not anticipated to be affected by the proposed activities. Jenny requested that the dipnet surveys include an open consideration of invertebrates, not only the fairy shrimp. Gary agreed this could be done.

Jenny confirmed that although it is unlikely that the Quino checkerspot is present, she would like the habitat survey to be completed so that it can be documented adequately.

Mary Meyers requested that although Braunton's milk vetch was not found on the NASA property, the lack of habitat would be better justified based on whether the soil type found where the offsite milk vetch was located differs from soils found onsite. CH2M HILL will look at the NRDC data and update its findings.

Mary asked that bryophytes in the rock outcrops be considered. Amy Keith confirmed after the meeting with Allen Elliott that rock outcrops will not be affected. With small areas of exception, the estimated areas of contamination do not overlay the rock outcrops. It is expected that areas can be treated with alternative, less-invasive cleanup technologies. This will be considered in the environmental review. Both Jenny and Mary had concerns about the use of the term "Natural Resources Management Plan (NRMP)." Mary noted that since there are no management measures, it should not be called a Management Plan. Jenny noted that typically, an NRMP developed for a military installation requires review, concurrence, and signature by the USFWS. Jeremiah confirmed after the meeting that the document will be used as a management tool; however, the name of the document will be changed to an Ecological Stewardship Plan.

Mary noted, and Jenny agreed, that while the tarplant is prevalent on the NASA property, it is a species of concern and could be listed during the life of the project; therefore, it should be protected. CH2M HILL agreed to look into whether the tarplant is as prevalent outside of the SSFL boundaries. Mary added that Boeing is working to avoid all tarplants. Leslie shared a comment brought up by CNPS (Betsey Landis) during the scoping period – identify and protect large populations of the tarplant in upland areas. Therefore, if NASA removes lowland populations, the species naturally will repopulate. Mary added that it might be a good idea to consult with Betsey Landis/CNPS in the mitigation development process.

Gary confirmed that no habitat for the threatened Coastal California gnatcatcher was identified.

Gary confirmed that no nests were found for the least Bell's vireo. Jenny added that USFWS is still concerned that habitat might be possible in this area. The level of impact is dependent on the level of riparian impacts.

Jenny confirmed that migration corridors will be considered in the EIS.

Jenny and Mary both agreed that development of a restoration plan as a form of mitigation is a good idea. NASA might consider coordinating with Boeing and DOE to consider what species should be included, what impacts are anticipated, what others are finding, and what mutual restoration actions could best benefit the species and ecosystem.

## Other Discussions

Additional discussion involved mapping the extent of the 2005 fire or any recent fires. A map may help us understand if the fire disturbances helped or hurt species propagation.

Jenny asked how NASA is planning on handling the fugitive emissions from all the anticipated excavation work beyond the typical use of water trucks. Leslie confirmed this would be considered in the EIS and stated that NASA is completing a general conformity analysis, which considers all project emissions including fugitive dust. Mitigations will have to consider if soils will be staged for extended periods of time.

**DTSC Coordination**—Jenny and Mary have both been in communication with DTSC (Brian Fockner) about SSFL activities. Jenny stated that DTSC will be scheduling a meeting with USFWS, CDFG, and SSFL land owners and

tenants in January 2012 to discuss activities and how coordinated efforts could take place. A specific date has not been set. Jenny noted Allen Elliott's name as the NASA point of contact.

**Timeline for the Biological Assessment**—Leslie provided the initial schedule for the BA development. Jenny added that she had not yet received a request for a species list, which is needed to initiate consultation. Jeremiah agreed to submit this information. Jenny added that the BA should not be submitted until all information is in (specifically the findings of the Quino Checkerspot Butterfly habitat survey). Furthermore, Jenny said that because the BA will only discuss the proposed action, if there is any chance that the proposed action could change or aspects of the project might change, she suggests not submitting until this is final. In other words, it might be worth holding off on submittal until after the Draft EIS is through public review. Leslie asked if the BA is submitted for the proposed action and the ultimate action is a lower level of impact, would the BO stand. Jenny confirmed that the BO would stand; however, NASA would have to uphold the higher level of mitigation agreed to in the BO. Leslie and Amy said they would discuss these options with the team and refine the schedule.

Jenny offered to share the USFWS Ventura Field Office template for the BA.

#### **Timeline for Section 7 Consultation—**

- NASA will send a formal request for a species list. USFWS will respond with this list and informal consultation will begin.
- NASA will make a determination of effect after all findings are in. NASA will send a letter to USFWS for concurrence. If it is a "May Adversely Affect" finding, a BA will be necessary.
- Once the remaining surveys are complete (~March 2012), NASA will send USFWS a letter requesting formal consultation.

#### **Permit Requirements—**

- NASA is anticipating preparing a BA and may need to get an Incidental Take Permit from USFWS if it is determined that take of a protected species may occur.
- On the basis of the upcoming wetlands delineation, NASA might require a Section 404 permit for impacts to wetlands or waters of the U.S.
- Mary confirmed that NASA likely will be exempt from the 1600 permit for streambed alteration because activities are on federal land. Mary will confirm after the January DTSC meeting. If this is needed, CDFG cannot issue the permit until DTSC completes their CEQA.

**Future Coordination and Consultation**—The group confirmed that NASA will coordinate directly with USFWS for this project. CDFG will be part of the public review process and through DTSC coordination, as appropriate. After the January meeting with DTSC, Leslie will check with Jenny for a download and to set up the next coordination meeting.

**Natural Resources Damage Assessment (NRDA)**—Jenny provided a general overview of an NRDA and added that this is a topic of discussion for the January 2012 meeting. The objective is to look at collective damage that might have occurred since 1980 from past activities, as well as potential damage from proposed activities. USFWS then works with the agencies to develop appropriate mitigation measures to restore the natural environment. Jenny added that it is possible to use the EIS as a mechanism to employ these mitigations if the NRDA is not found to be advantageous to the USFWS. Jenny also added that the NRDA process occurs parallel to other activities and should not delay the NEPA or other environmental review processes.

#### **Action Items**

- CH2M HILL will include a CRLF habitat survey during the wetlands delineation.
- Based on the meeting discussion, CH2M HILL checked the soil type in the area where the Braunton's milk vetch was located. It was found that Gaviota rocky sandy loam soils underlies the identified milk vetch

location. This is the same soil type found in the northeastern portion of Area II and in southern portion of LOX Area I. This will be considered in the biological study.

- Based on the meeting discussion, Amy Keith verified that rock outcrops on the NASA-administered property would be avoided.
- Amy will coordinate with DOE re: radionuclide testing at SSFL including on the NASA property.
- Jeremiah will send USFWS a request for a species list to initiate informal consultation.
- Subsequent to this meeting, Jenny Marek sent Gary Santolo the USFWS Ventura Field Office template for the BA.
- Leslie Tice will set up the next Section 7 coordination meeting after the January DTSC meeting.

## **Attachment Informational Packet**

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# Environmental Impact Statement and Section 7 Consultation Information Packet for the Proposed NASA Environmental Cleanup Activities and Demolition at Santa Susana Field Laboratory, Ventura County, California

## Project Overview

The National Aeronautics and Space Administration (NASA) is preparing an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) to evaluate the proposed environmental cleanup and demolition activities at the Santa Susana Field Laboratory (SSFL) in Ventura County, California. Preparation of an EIS will meet the NEPA obligations of the Administrative Order on Consent (AOC) signed with the Department of Toxic Substances Control. As part of the environmental review process, NASA is initiating informal consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Game.

Four project action alternatives and the no action alternative are considered in the EIS:

- Cleanup of Soils to Background Levels (Proposed Action)
- Cleanup of Soils to Suburban Residential Cleanup Goals
- Cleanup of Soils to Commercial/Industrial Cleanup Goals
- Cleanup of Soils to Recreational Cleanup Goals

Each of these action alternatives also considers groundwater remediation and the demolition of up to 100 percent of the structures on the NASA-administered property at SSFL. The purpose of this action is to support property disposition.

## Overview of Surveys Conducted

NASA's involvement with biological surveys began in 2008 with site-specific surveys to support remedial investigations and ecological risk assessments for NASA-administered sites at SSFL. General plant and wildlife lists from opportunistic observations were created at this time.

In 2010, NASA updated habitat mapping and assessed the potential for rare plants and wildlife to occur on the entire NASA-administered property at SSFL in support of a draft Natural Resource Management Plan. This habitat mapping and wildlife survey was conducted in the fall (late September-early October). Global positioning system (GPS) mapping of more than 3,600 Santa Susana tarplant locations was completed at that time.

The fall 2010 summary report recognized that many of the plants had senesced, indicating that the rare plant surveys should be conducted the following year at times that would be expected to give the most complete understanding of the range of plants potentially occurring at SSFL. It also was recognized that additional wildlife surveys during these different times of the year would provide a greater understanding of the range of wildlife use of SSFL.

Therefore, additional surveys were planned in 2011 that would: 1) assess the potential for rare plants; 2) develop a more complete inventory of listed and non-listed wildlife at SSFL; and 3) fully characterize wetlands and waters on the NASA-administered property. At this point, the first two items have been addressed while the third item (wetlands) will be completed in the winter of 2011/2012. Three week-long surveys were completed in 2011 in April, June, and August to document the flora and fauna on NASA-administered property.

## Species of Concern

The following federally listed threatened or endangered species are known to occur or have the potential to occur on the SSFL project area:

### Braunton's milk vetch (*Astragalus brauntonii*)

This plant was observed at a reference location that occurs on the Boeing property at SSFL during all of the site visits. However, this plant was not detected at any location of the NASA-administered property. Note that the CNDDDB Occurrence No. 7, shown on Figure 4, was based upon non-specific site location information that did not match the terrain around Skyline Drive where the coordinates fell. The CNDDDB location detail states that the "exact location of Silvernale Ranch is unknown. The species is mapped near Burro Flats, which is presumed to be "open fields" referred to by Koppler. It is likely that the CNDDDB staff made their best guess as to where this plant might be and that the reference population we have been using – located slightly to the south of Burro Flats may be closer to the actual location.

### Dudleya spp.

There was concern that one of the two species observed in the early surveys potentially could be one of the listed Dudleya spp. known to occur in the general vicinity of SSFL. It was only during the June survey (when the plants were flowering) that it was decided, in conjunction with a National Park Service botanist, Tarja Sagar, that the non-chalky species observed onsite was *D. lanceolata* and not one of the listed species. Four offsite Dudleya spp. reference sites were visited during the June survey to help assess interspecies variability and field characteristics.

### Santa Susana tarplant (*Deinandra minthornii*)

More than 3,600 locations of these plants were documented by GPS within the NASA-administered property at SSFL during the fall 2010 habitat survey; no additional work was done for this species in 2011.

### Quino checkerspot butterfly (*Euphydryas editha* ssp. *quino*)

A possible (unconfirmed) sighting of this butterfly occurred during the fall 2010 survey. The conclusion was that the habitat for this species is only marginally suitable and the likelihood of occurrence is low. Dr. Dick Arnold, an accredited entomology expert in this species, has been engaged to assess habitat conditions in the NASA-administered property at SSFL and the potential for the butterfly to occur in these areas. Dr. Arnold's habitat survey tentatively is scheduled for February/March 2012 when the butterfly's food plants are expected to be in bloom.

### Riverside fairy shrimp (*Streptocephalus woottonii*) & Vernal pool fairy shrimp (*Branchinecta lynchi*)

Most of the sandstone basins occur near topographic high points associated with the sandstone formations. The potential occurrence of both of these shrimp species was assessed by opportunistic surveys for the small sandstone basins that have been mapped on the NASA-administered property at SSFL. Each pool was revisited during each site visit and, if the pool contained water, then a close visual inspection and dip-netting were conducted to assess the potential occurrence of these shrimp. Protocol-level surveys were not completed because there currently are no anticipated impacts that will occur in these areas from the proposed remedial activities.

### California red-legged frog (*Rana aurora* ssp. *draytonii*)

There are three potential locations on the NASA-administered property at SSFL where this species might occur—a pond in the northwestern corner of Area 1 and two stormwater detention ponds (R-9 Pond and Coca Detention Pond). This species was not observed during opportunistic surveys at any of the three locations.

### Least Bell's vireo (*Vireo bellii* ssp. *pusillus*)

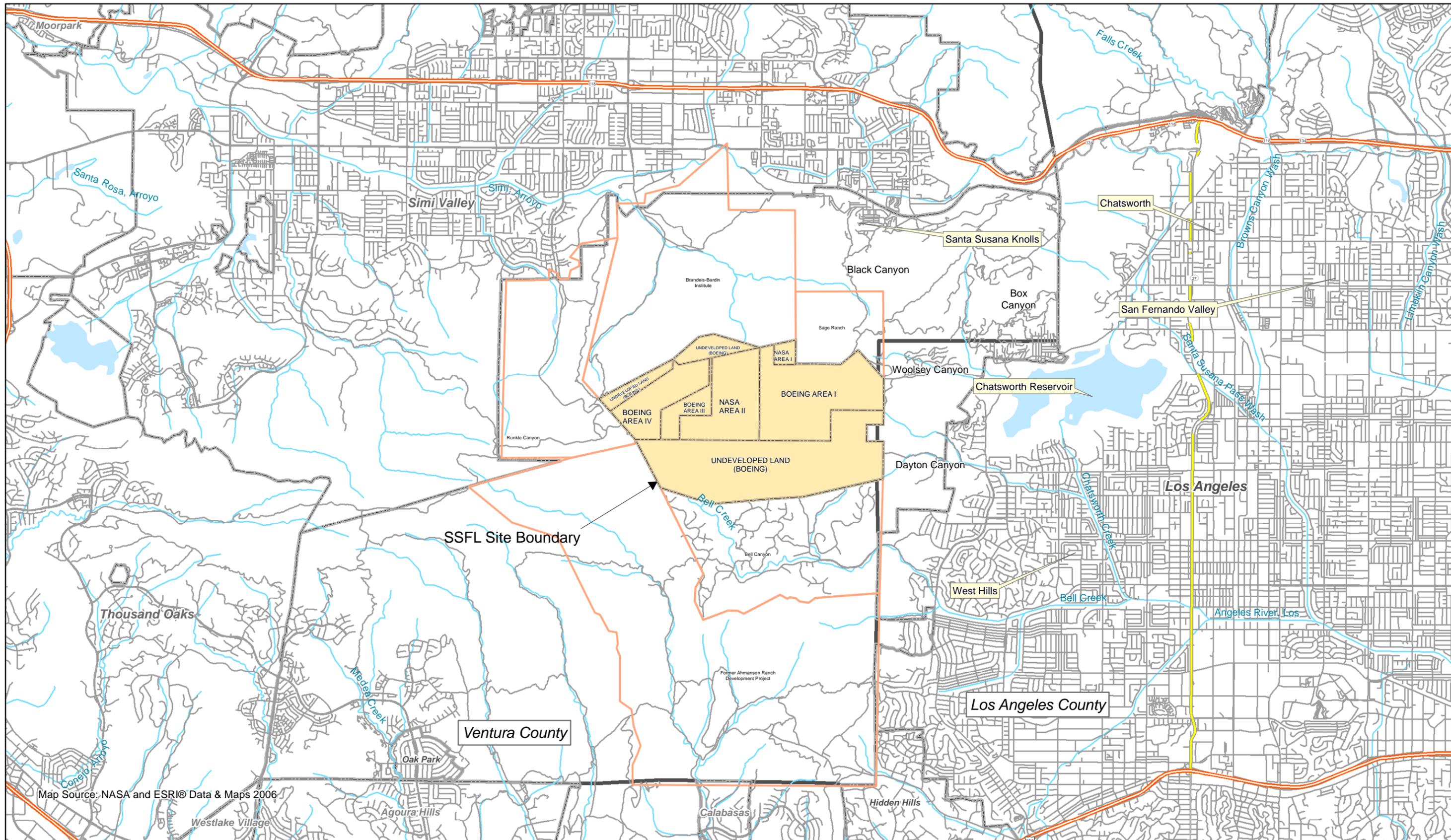
The least Bell's vireo was sighted in coyote brush adjacent to the oak woodland west of the Ash Pile. It was observed during the August 2011 survey, after the typical breeding period (April 10 to July 31), and might have been a transient bird moving through the study area. Mule fat, a favored plant of the least Bell's vireo, was present in the survey area; however, the vegetation in the area was predominantly fragmented and open, with only limited areas containing an upper canopy. Habitat fragmentation detracts from the overall habitat quality in the study area. No Bell's vireos were observed or heard while surveys were being conducted during their breeding period.

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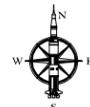
## Figures

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Map Source: NASA and ESRI® Data & Maps 2006



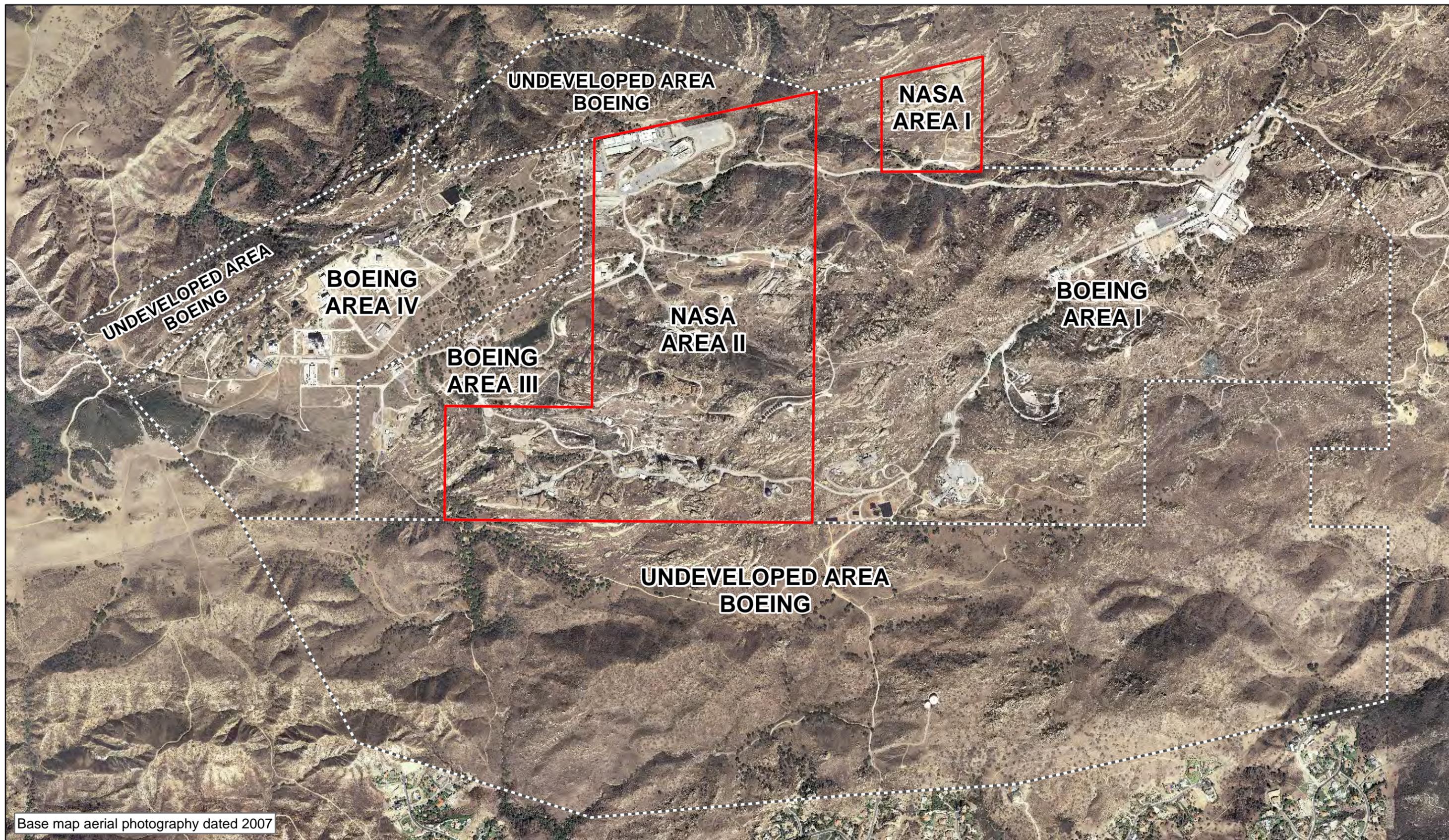
0 0.5 1 2 Miles  
 0 0.75 1.5 3 Kilometers

02-Nov-2011  
Drawn By:  
A. Cooley

**DRAFT**

Figure 1  
Regional Map  
NASA Supplemental Biological Survey – 2011  
Santa Susana Field Laboratory  
Ventura County, California

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Base map aerial photography dated 2007



02-Nov-2011  
Drawn By:  
A. Cooley

0 750 1,500 3,000 Feet

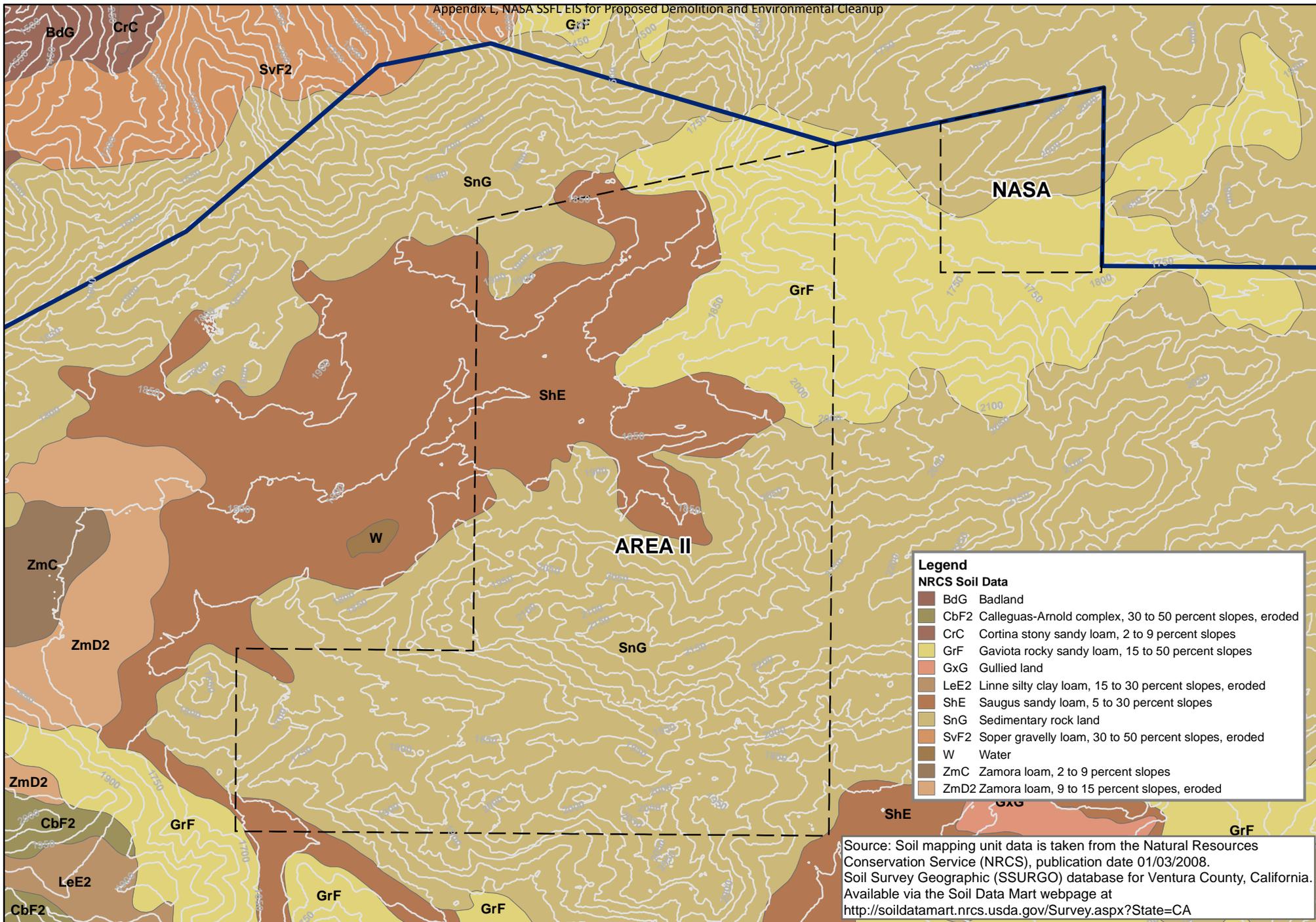
Legend

- NASA Property Boundary
- Administrative Area

**DRAFT**

Figure 2  
Site Overview  
NASA Supplemental Biological Survey – 2011  
Santa Susana Field Laboratory  
Ventura County, California

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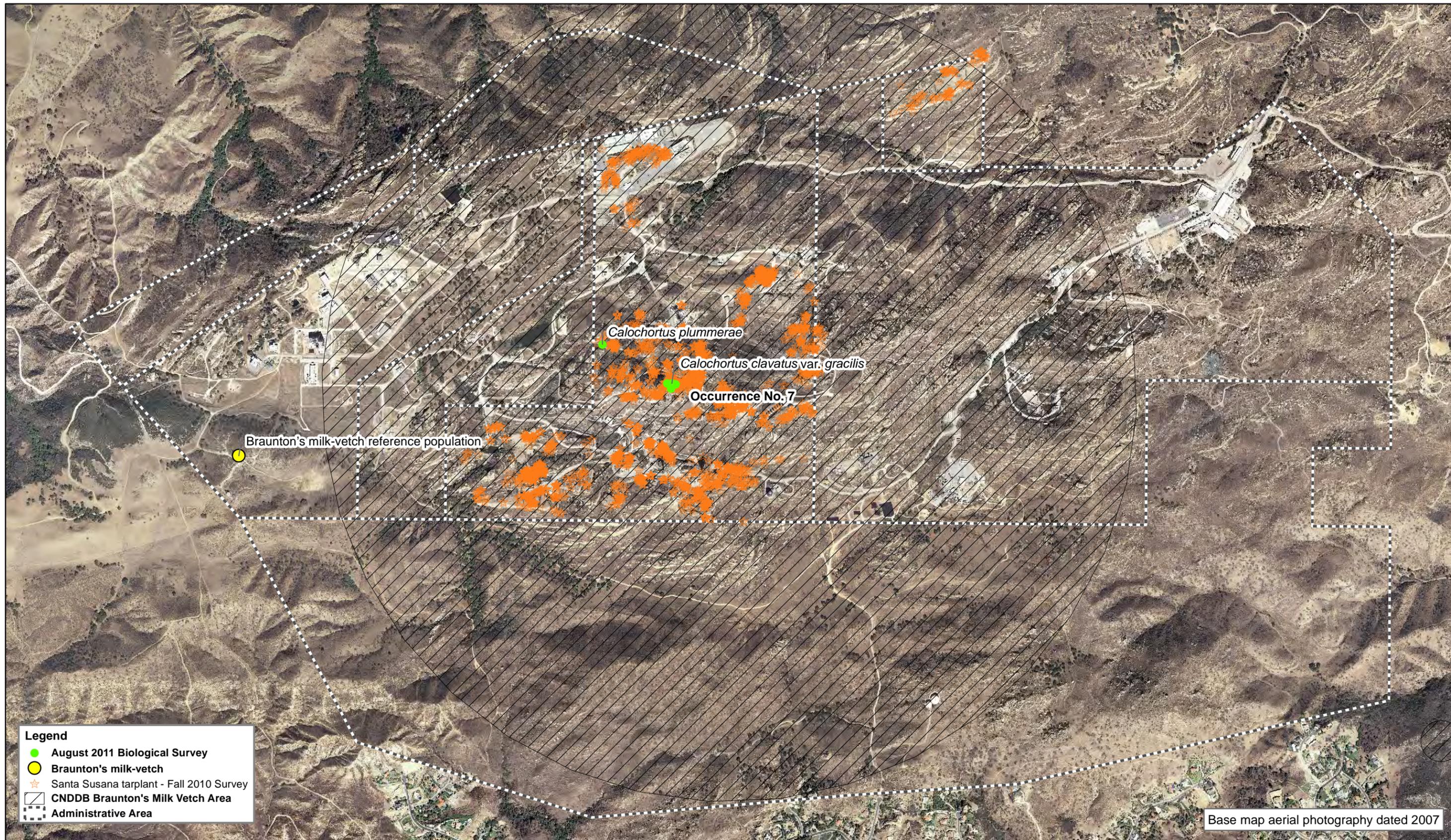
02-Nov-2011  
 Drawn By:  
 A. Cooley

L-41

**DRAFT**

**Figure 3**  
**NRCS Soil Mapping**  
**NASA Supplemental Biological Survey - 2011**  
**Santa Susana Field Laboratory**  
**Ventura County, California**

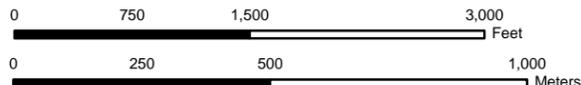
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**Legend**

- August 2011 Biological Survey
- Braunton's milk-vetch
- ★ Santa Susana tarplant - Fall 2010 Survey
- CNDDDB Braunton's Milk Vetch Area
- Administrative Area

Base map aerial photography dated 2007

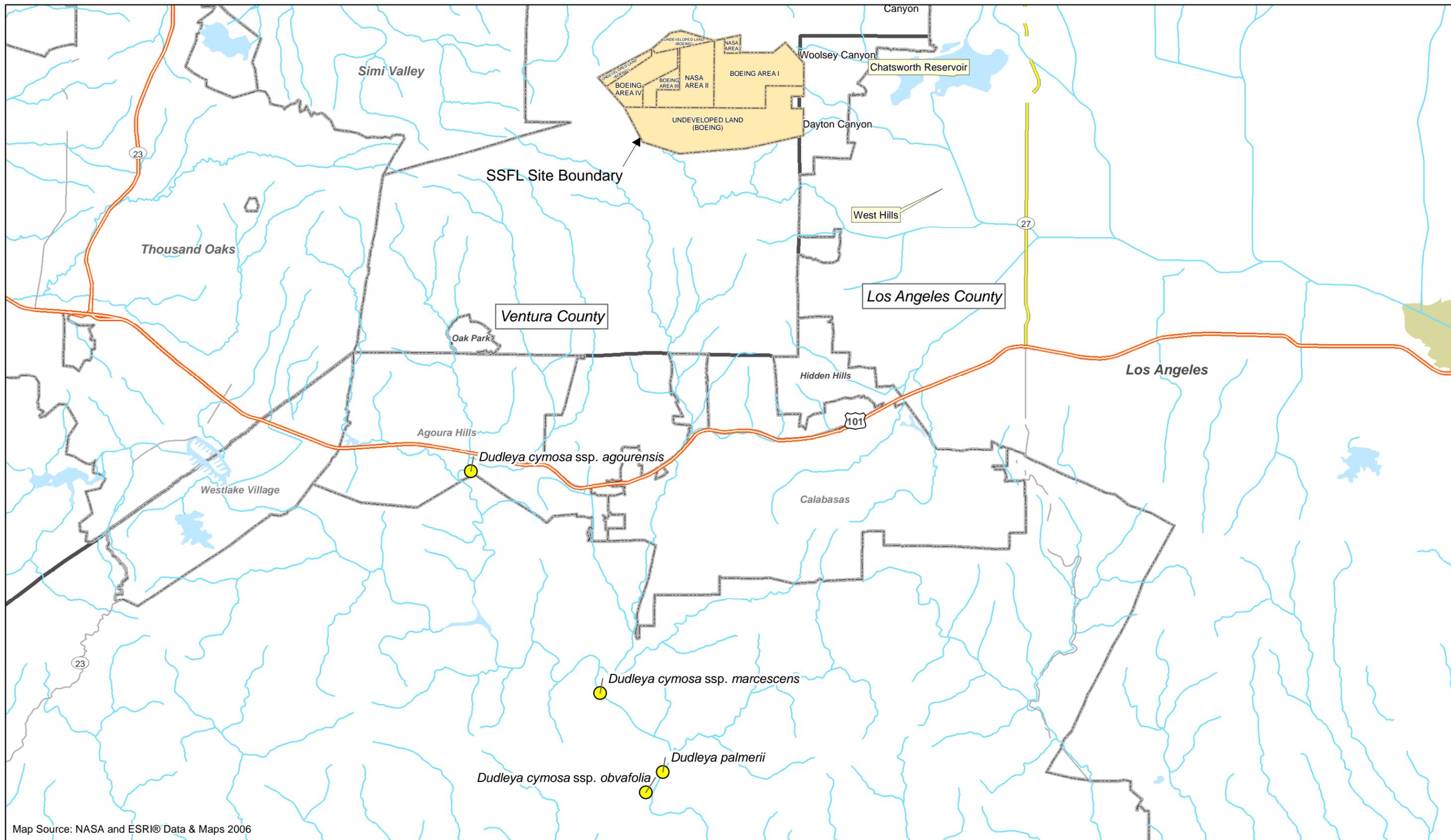


**DRAFT**

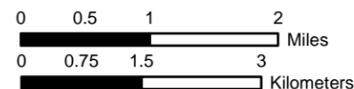
09-Nov-2011  
Drawn By:  
A. Cooley

**Figure 4**  
Rare Plant and Reference Site Locations  
NASA Supplemental Biological Survey – 2011  
Santa Susana Field Laboratory  
Ventura County, California

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Map Source: NASA and ESRI® Data & Maps 2006

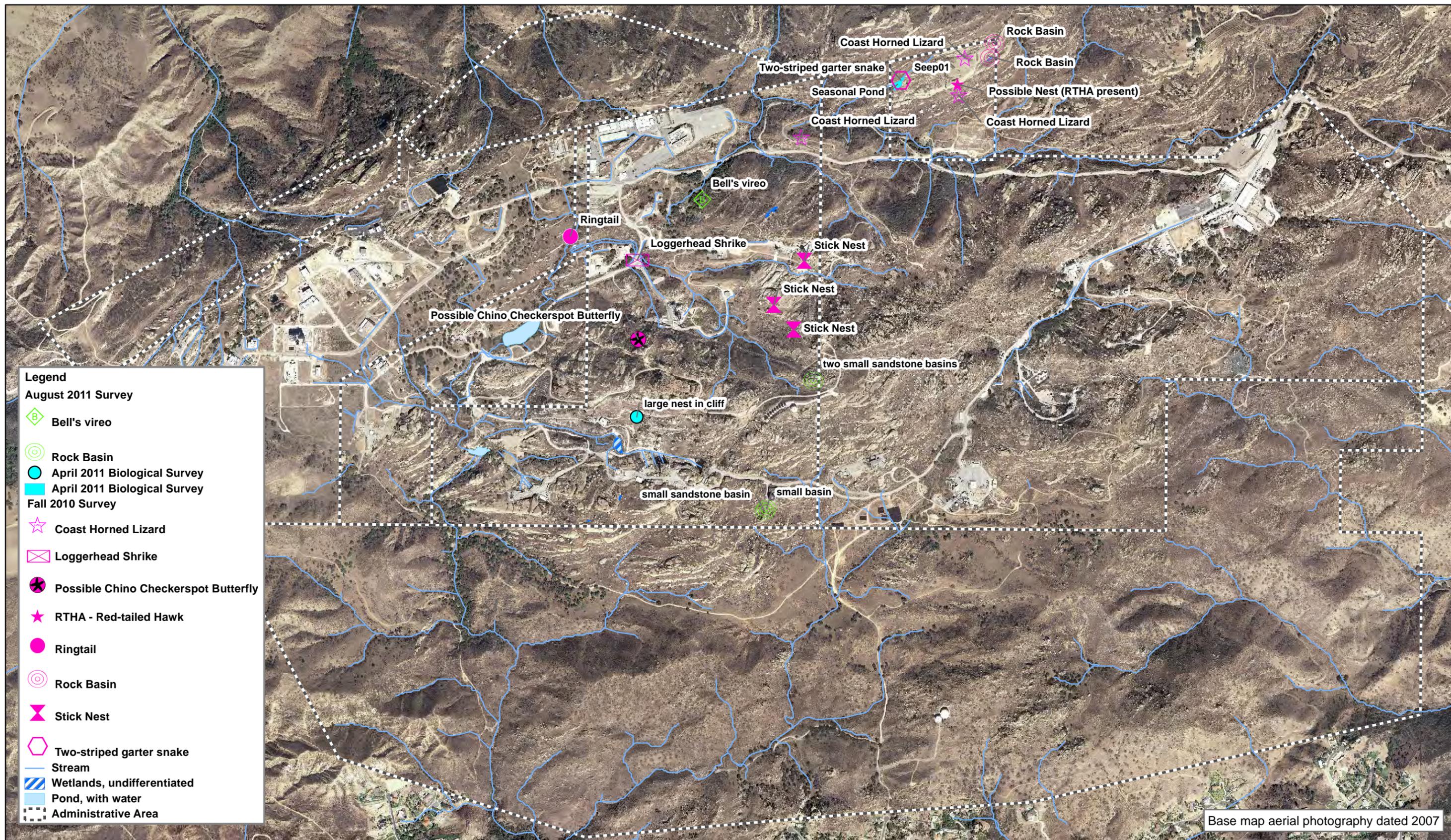


02-Nov-2011  
 Drawn By:  
 A. Cooley

**DRAFT**

Figure 5  
 Dudleya spp. Reference Locations  
 NASA Supplemental Biological Survey – 2011  
 Santa Susana Field Laboratory  
 Ventura County, California

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**Legend**

**August 2011 Survey**

- Bell's vireo
- Rock Basin

**April 2011 Biological Survey**

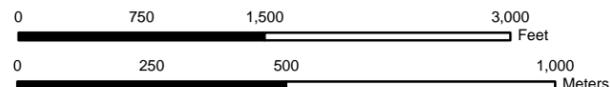
- April 2011 Biological Survey
- April 2011 Biological Survey

**Fall 2010 Survey**

- Coast Horned Lizard
- Loggerhead Shrike
- Possible Chino Checkerspot Butterfly
- RTHA - Red-tailed Hawk
- Ringtail
- Rock Basin
- Stick Nest
- Two-striped garter snake

- Stream
- Wetlands, undifferentiated
- Pond, with water
- Administrative Area

Base map aerial photography dated 2007



**DRAFT**

02-Nov-2011  
Drawn By:  
A. Cooley

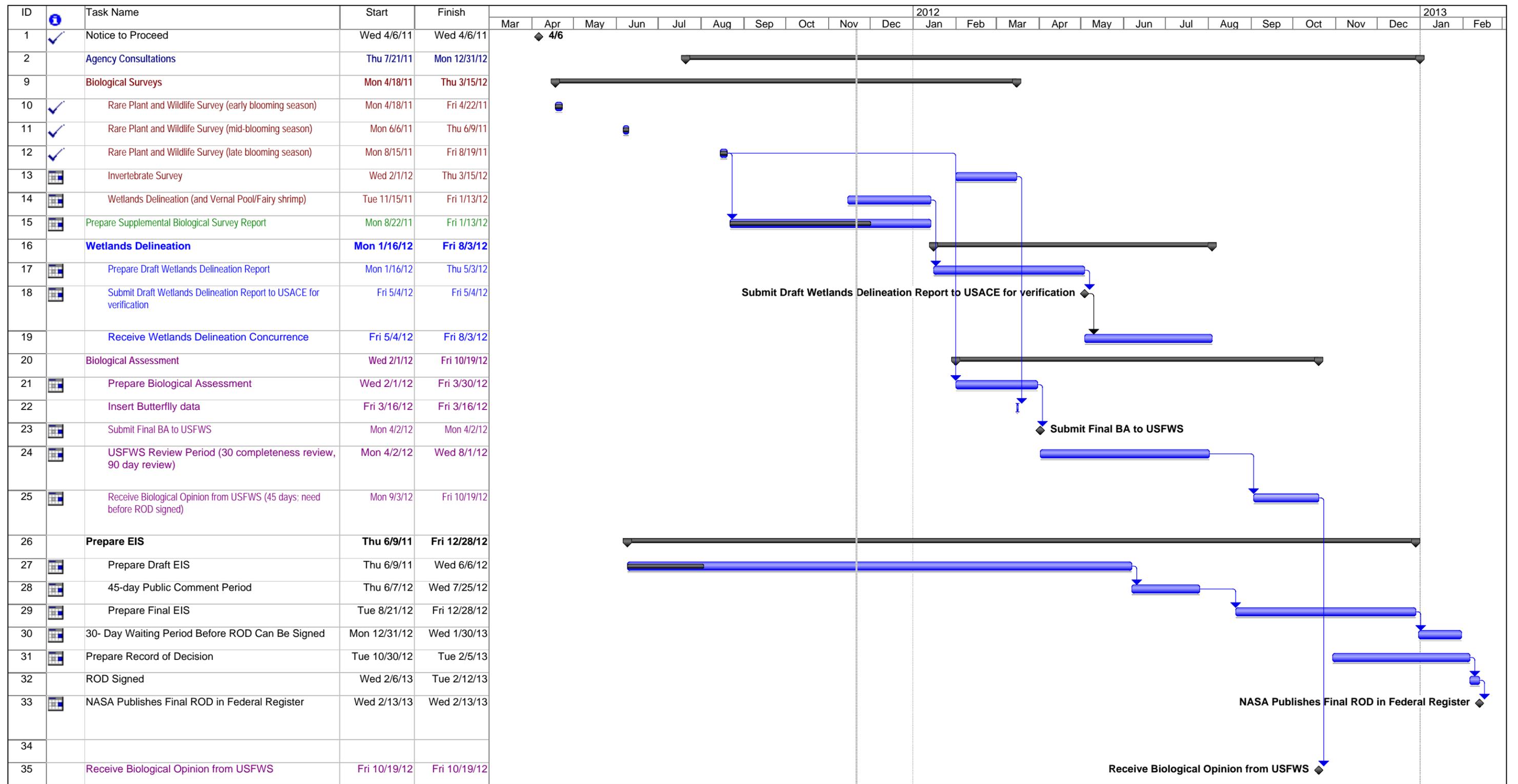
**Figure 6**  
**Significant Wildlife Observations**  
**NASA Supplemental Biological Survey – 2011**  
**Santa Susana Field Laboratory**  
**Ventura County, California**

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## **Schedule**

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Schedule is current as of December 1, 2012

|  |       |  |           |  |                 |  |                    |  |          |  |
|--|-------|--|-----------|--|-----------------|--|--------------------|--|----------|--|
| Project: SSFL-Schedule-29April2011<br>Date: Mon 11/21/11 | Task  |  | Progress  |  | Summary         |  | External Tasks     |  | Deadline |  |
|  | Split |  | Milestone |  | Project Summary |  | External Milestone |  |          |  |

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National Aeronautics and Space Administration  
**George C. Marshall Space Flight Center**  
Marshall Space Flight Center, AL 35812

December 21, 2011

Reply to Attn of: Office of Center Operations

U.S. Fish and Wildlife Service, Ventura Field Office  
2493 Portola Road, Suite B  
Ventura, California 93003  
(805) 644-1766 ext. 325  
Attn: Jenny Marek

Subject: Request for Listed Species and Critical Habitat for the NASA-administered property at Santa Susana Field Laboratory in Ventura County, California

Dear Ms. Marek,

The National Aeronautics and Space Administration (NASA) would like to officially request a list of any threatened and endangered or proposed threatened and endangered species, as well as any designated or proposed critical habitat that may be known to occur within the NASA-administered property at Santa Susana Field Laboratory (SSFL). SSFL is located 30 miles northwest of downtown Los Angeles in southeastern Ventura County, near the crest of the Simi Hills at the western border of the San Fernando Valley. The NASA-administered property at SSFL consists of 41.7 acres within Area I and all 409.5 acres of Area II. Attached is a map showing NASA-administered portion of SSFL. If you have any questions regarding this, please contact Jeremiah Kolb at 256-544-6304.

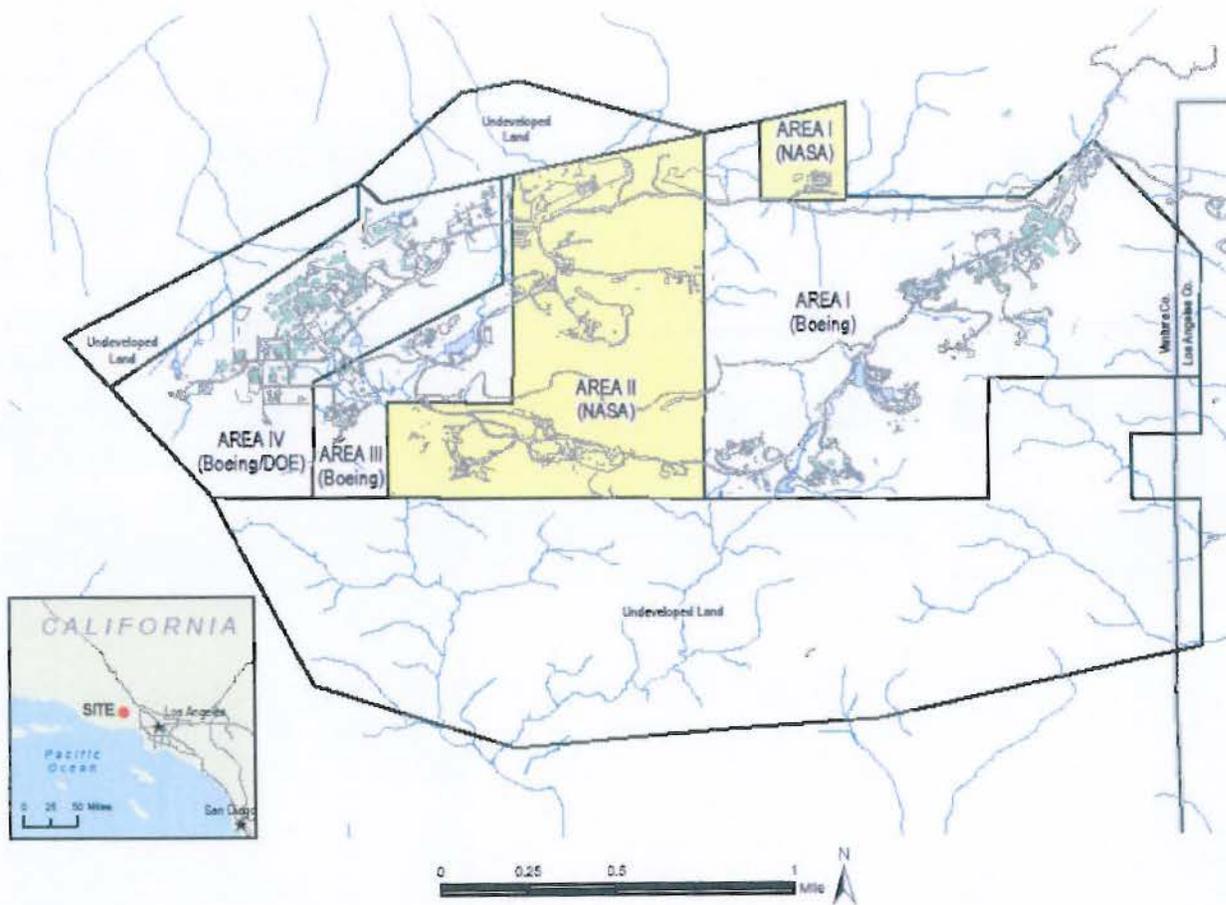
Sincerely,

A handwritten signature in blue ink that reads "Allen Elliott".

Allen Elliott  
SSFL Project Director  
National Aeronautics and Space Administration (NASA)

Attachment: NASA-administered property map

cc: Mary Meyers, CDFG  
Leslie Tice, CH2MHill



Attachment



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Ventura Fish and Wildlife Office  
2493 Portola Road, Suite B  
Ventura, California 93003

IN REPLY REFER TO:  
08EVEN00-2012-SL-0119

January 6, 2012

Allen Elliott, SSFL Project Director  
Office of Center Operations  
National Aeronautics and Space Administration  
George C. Marshall Space Flight Center  
Marshall Space Flight Center, Alabama 35812

Subject: Species List for the NASA-administered property at the Santa Susana Field Laboratory, Ventura County, California

Dear Mr. Elliott:

We are responding to your request dated December 21, 2011 and received in our office on December 27, 2011 for information on listed species and critical habitat that may occur at or near portions of Santa Susana Field Lab (SSFL) that are administered by the National Aeronautics and Space Administration (NASA). SSFL was developed as a remote site to test rocket engines and conduct nuclear research, and is comprised of four administrative areas and two undeveloped land areas. NASA-administered property at SSFL consists of 41.7 acres within Area I and all 409.5 acres of Area II.

The U.S. Fish and Wildlife Service's (Service) responsibilities include administering the Endangered Species Act of 1973, as amended (Act), including sections 7, 9, and 10. Section 9 of the Act prohibits the taking of any federally listed endangered or threatened species. Section 3(19) of the Act defines take to mean to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Service regulations (50 CFR 17.3) define harm to include significant habitat modification or degradation which actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. Harassment is defined by the Service as an intentional or negligent action that creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering. The Act provides for civil and criminal penalties for the unlawful taking of listed species.

NASA, as the lead Federal agency for the project, has the responsibility to review its proposed activities and determine whether any listed species or critical habitat may be affected. If the subject project may affect a listed species, NASA must consult with the Service, pursuant to section 7(a)(2) of the Act. During the consultation process, NASA may engage in planning

Allen Elliott

2

efforts but may not make any irreversible commitment of resources. Such a commitment could constitute a violation of section 7(d) of the Act.

The enclosed list of species fulfills the requirements of the Service under section 7(c) of the Act. Only listed species receive protection under the Act; however, sensitive species should be considered in the planning process in the event they become listed or proposed for listing prior to project completion. We recommend that you review information in the California Department of Fish and Game's Natural Diversity Data Base. You can contact the California Department of Fish and Game at (916) 324-3812 for information on other sensitive species that may occur in this area.

If you have any questions regarding this matter, please contact Jenny Marek of our staff at (805) 644-1766, extensions 325.

Sincerely,



Jeff Phillips  
Deputy Assistant Field Supervisor

cc:

Mary Meyer, California Department of Fish and Game  
Stephie Jennings, Department of Energy

**LISTED SPECIES WHICH MAY OCCUR  
NEAR AREA I AND II OF THE SANTA SUSANA FIELD LAB,  
VENTURA COUNTY, CALIFORNIA**

Plants

|                                 |  |   |
|---------------------------------|--|---|
| Braunton's milk-vetch           | <i>Astragalus brauntonii</i>   | E |
| Lyon's pentachaeta              | <i>Pentachaeta lyonii</i>  | E |
| Spreading navarretia            | <i>Navarretia fossalis</i>   | T |
| Conejo dudleya                  | <i>Dudleya abramsii</i> ssp. <i>parva</i> [ <i>Dudleya parva</i> ]   | T |
| Santa Monica Mountains dudleya  | <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i><br>[inclusive of <i>Dudleya cymosa</i> ssp. <i>agourensis</i> ] | T |
| Marcescent dudleya              | <i>Dudleya cymosa</i> ssp. <i>marcescens</i>   | T |
| California Orcutt grass         | <i>Orcuttia californica</i>  | T |
| San Fernando Valley spineflower | <i>Chorizanthe parryi</i> var. <i>fernandina</i>   | C |

Birds

|                                |   |   |
|--------------------------------|---|---|
| Coastal California gnatcatcher | <i>Polioptila californica californica</i> | T |
| Least Bell's vireo             | <i>Vireo bellii pusillus</i>              | E |

Amphibians

|                            |                       |   |
|----------------------------|-----------------------|---|
| California red-legged frog | <i>Rana draytonii</i> | T |
|----------------------------|-----------------------|---|

Invertebrates

|                             |                                 |   |
|-----------------------------|---------------------------------|---|
| Quino checkerspot butterfly | <i>Euphydryas editha quino</i>  | E |
| Vernal pool fairy shrimp    | <i>Branchinecta lynchi</i>      | T |
| Riverside fairy shrimp      | <i>Streptocephalus woottoni</i> | E |

**Key:**

E – Endangered

T – Threatened

C – Candidate

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technical approaches to meet the cleanup goals, consistent with the EIS analysis, in the case that several technologies are implemented. Jenny agreed with this approach.

Laurel concluded that, with this process, NASA concluded in the BA that there is a potential to effect but not likely to adversely affect CRLF, the two species of fairy shrimp, and the least Bell's vireo. Based on the findings of the March survey, there would be no effect on the Quino checkerspot butterfly.

Jenny asked about the gnatcatcher. Gary responded that no suitable habitat was identified during the habitat surveys. While coastal sage scrub was observed, it was not extensive, it was fragmented, and surrounding habitat was not supportive.

### **Other Discussions**

Migratory Birds are covered in the EIS. Jenny suggested adding the typical best management practices of pre-work bird nesting surveys if work is conducted within nesting season (likely) and to work outside of nesting season as possible. Jenny added that they typically suggest buffers of

- 300 feet of non-listed bird nesting
- 500 feet of raptor nests
- 500 feet of other threatened or endangered species

Jenny will check with the migratory bird division at USFWS to see if there are any other mitigations or BMPs that should be included.

Laurel added that through the analysis it was found that project work would be 75 feet from the designated migration corridor, overlapping the very southeastern corner of Area II. As such, there would be no direct effects of the action. Jenny offered to check with the migration corridor division of USFWS for appropriate mitigations or BMPs to address potential indirect effects.

Lastly, Jeremiah confirmed with Jenny that a request for formal consultation and concurrence could accompany the BA in the form of a letter. Jenny agreed and clarified that typically this letter would include a table summarizing the listed species and the findings of effects and a formal request for concurrence. Jeremiah confirmed that the species list provided by USFWS in January would suffice.

### **Timeline for Section 7 Consultation—**

- The draft wetlands delineation report has been submitted to USACE, however response back from the designated project manager has not been received. Jeremiah and Jenny agreed that it will likely be Antal Szijj, who is working with DOE and Boeing. The verification site visit will likely take place in May.
- CH2M HILL is finalizing the draft BA now and will incorporate information and additional detail from this meeting. NASA will review the BA next and is on track to submit the BA to USFWS in early June, as previously discussed.
- Jenny added that USFWS's timeline for concurring a finding of *Not Likely to Adversely Affect* is typically 30 days. It otherwise acknowledges but does not concur with findings of *No Effect*.

### **Future Coordination and Consultation—**

- Jenny encouraged NASA to have a similar meeting to keep Mary Meyers in the loop.
- Following the USACE verification, NASA will hold a teleconference with USACE, RWQCB, and CDFG to review wetlands/waters findings.
- After USFWS receives the BA, NASA will set up the next consultation call with Jenny to discuss BA information and possible mitigations.

### **Action Items**

- CH2M HILL and NASA will update the BA based on meeting discussions.

- NASA will submit with the BA, a letter asking for concurrence, per the direction of Jenny Marek.
- Jenny Marek will provide to NASA:
  - DOE fairy shrimp survey data
  - Feedback re: mitigations or BMPs relevant to either migratory birds or migration corridors.

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## **L-2: Other Agency Consultation**

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MEETING SUMMARY

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## Santa Susana Field Laboratory–EIS

### NASA and CDFG Consultation Meeting

ATTENDEES: Jeremiah Kolb/ERT Gary Santolo/CH2M HILL  
 Amy Keith/NASA Jason Glasgow/CH2M HILL  
 Mary Meyer/CDFG Russ Huddleston/CH2M HILL  
 Jeff Humble/CDFG  
 Brock /CDFG

COPIES: Allen Elliott/NASA  
 Beth Vaughan/CH2M HILL

FROM: CH2M HILL

DATE: May 14, 2012

METHOD: Teleconference with LiveMeeting

- The team reviewed the NASA-administered areas and the studies that have been completed to update Jeff Humble/CDFG on the progress.
- Gary Santolo/CH2M HILL reviewed the surveys that have been conducted and the habitat mapping efforts and reviewed the list of species that were identified during the surveys. Jeff Humble was interested in the ringtail cat that was spotted and the home range and habitat that would support the species.
- Mary Meyer/CDFG suggested that NASA speak to the other teams at SSFL (The Boeing Company and the Department of Energy) and evaluate how the results of their surveys compare with NASA's.
- Jason Glasgow/CH2M HILL explained the current sampling that is being conducted, the implications of the Administrative Order on Consent (AOC), and how the Department of Toxic Substances Control (DTSC) is integrated into the project.
- Mary Meyer requested information regarding the wetland survey and if there was standing water and the potential habitat for the fairy shrimp. No standing water was in the vernal pools during the survey; however, there is a potential they could be present. The operations at the R-2 ponds were also discussed and the Coca pond that stays pretty wet. The Horse Pond and two-striped garter snake that was found was mentioned, along with a seep that is on a map that may feed the pond. There was discussion on whether the seep was seasonal (having been observed during the fall survey). There are some state sensitive species that have been identified in the area that may be near the Horse Pond.
- Russ Huddleston/CH2M HILL spoke about the January wetland survey results and explained that they have been sent to the U.S. Army Corps of Engineers (USACE) for verification purposes. USACE may want to conduct a site visit.
- Mary Meyer is going to seek clarification with DTSC on their Council of Environmental Quality Act (CEQA) role in the process. She is concerned about the jurisdiction of the ephemeral drainages in Area I and Area II.
- Discussion was held on what wetlands are under USACE jurisdiction.
- The butterfly survey was discussed and the results indicate that habitat is not present to support them.
- Rare plant surveys have been completed. CDFG discussed potential effects to Santa Susana tarplant; Gary Santolo pointed out that most of the tarplant were found on the rock outcrops and would not be affected by remediation.

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**End of Appendix L**

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