

APPENDIX III

FEDERAL AID SECTION 7 EVALUATION FORMS

**STATE COMPLIANCE WITH REQUIREMENTS OF THE ENDANGERED SPECIES
ACT OF 1973**

FOR THE

HAWAII GAME MANAGEMENT PROGRAM FY2001-2005

PREPARED BY

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DIVISION OF FORESTRY AND WILDLIFE

Federal Aid Section 7 Assessment
HAWAII GAME MANAGEMENT PROGRAM FY2001-2005

In developing these projects, precautions have been taken to evaluate potential impacts to threatened and endangered species and to incorporate measures which will protect listed species that may be affected by project activities. Hawaii currently has 377 species listed as threatened or endangered, an additional 123 proposed or candidate species under consideration for listing and 1,084 species of concern (See Appendix II for a list of endangered, threatened, proposed, and candidate species found on the various Islands throughout the State). A Federal Aid Assessment (Section 7 Evaluation Form) has been completed by the State Federal Aid Coordinator for each project to identify potential impacts and, where needed, incorporate additional measures that the State will take to avoid impacts or ensure that listed species are identified and protected.

The Division believes that Findings of "No Effect" or "Not Likely To Adversely Affect Listed Species" are warranted for the project activities in this grant package. The following considerations and mitigative measures were factors in reaching those findings.

1. The majority of the activities carried out under this program are routine, ongoing and located in disturbed areas with no or very few listed species. Improvements are located to avoid impacts to listed species during construction and use.
2. 25% of the State's Federal Aid PR Program is dedicated to Nongame/Endangered Species wildlife activities that directly benefit and enhance listed species
3. Many of the Game Management Program activities benefit and enhance listed species. For example, predator control and water unit development for game birds also benefit nene in many areas. Roads, trails and facilities developed or maintained in remote areas increase hunter pressure which help control game mammals.
4. DOFAW's Resource Management Guidelines and distribution maps of listed species were used as planning tools in developing game management project activities and in assessing potential impacts to listed species in completing the State's portion of the Section 7 Assessments. The major focus of the game enhancement program utilizing Federal funds is for game birds, which involves activities that are unlikely to adversely affect listed species.
5. Program activities that might enhance game mammal populations have been purposefully designed, and specific mitigative actions recommended, to avoid activities that directly affect listed species. Program activities that do enhance game mammal populations are done in "Game Production" areas and these projects include a commitment to identify and protect listed species in the area that are at risk from game mammals.
6. Where there is a potential for adverse impacts to listed species, DOFAW has included actions to mitigate impacts such as fencing endangered plants, creation of "No Hunting" safety zones for nene, and educational materials for hunters to increase their awareness of endangered species that may be in Hunting areas.

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

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State: Hawaii

Project Number: W-22-GC: Project 1.

1. **NAME AND DESCRIPTION OF PROJECT:** Statewide Game Program Coordination. Project Period FY2001-2005.
2. **LOCATION(S):** (attach map) State of Hawaii
3. **OBJECTIVES OF THE ACTION:** To establish and maintain a system of planning, review, record keeping, project monitoring, supervision, reporting and coordination among staff and outside personnel and agencies adequate to meet the requirements for participation in and administration of the game management portion of the State's Federal Aid in Wildlife Restoration Program.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed for the State of Hawaii. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the administrative nature of the planned actions, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
 - a. Approve Project as proposed with no need for modification.
 - b. Modify Project to Benefit

State Reviewer: PAUL J. CONRY

Date: 11 April 2000

SECTION 7 EVALUATION FORM
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State: Hawaii
Project 1

Project Number: W-23-GL:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Land Acquisition - Hawaii. To lease additional land for game management purposes on the Island of Hawaii. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kipuka Aina Hou Wildlife Sanctuary within the Mauna Loa Game Management Area, Hawaii and portions of the Mauna Kea Forest Reserve and Public Hunting Area. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To lease a portion of the Kipuka Aina Hou Wildlife Sanctuary (11,124-acres), and portions of the Mauna Kea Forest Reserve and Public Hunting Area (4,303 acres) totaling 15,427 acres for wildlife management and game bird and mammal hunting.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data)

Kipuka Ainahou. The lease of 11,124 acres of Hawaiian Homes Land comprising portions of the Kipuka Ainahou Wildlife Sanctuary will provide for game bird hunting during the November –January general game bird hunting season (with dogs) and spring turkey season (no dogs), and archery game mammal hunting (without dogs) in March - October.

The Ainahou area was designated a Game Management Area and public shooting ground in 1954 and opened to game mammal and bird hunting. Nene were first released in this area in the 1970s with a total of 320 birds released during 1973-1975 and the area was designated a Nene Wildlife Sanctuary in 1974. The 38,400 acre Sanctuary is located within and considered a portion of the 186,511 acre Mauna Loa Game Management Area where regular hunting occurs.

Opening the area for hunting potentially, may have an adverse affect on endangered Nene if a Nene were shot or attached by a hunting dog. However, Nene do not seem to consider this good habitat and only use the area infrequently. Nene have not been released in the Sanctuary for the last 20 years because of poor survival due to inadequate habitat and small mammal predation. The number of nene using this general area now is thought to be about 16 birds with 3 or 4 birds occasionally observed in the Kipuka Ainahou Sanctuary. Most Nene use in this area is concentrated in the vicinity of Puu 6677 and Puu Oo Ranch. There is not a resident breeding population in the Sanctuary. The birds that periodically use the area, forage there during the day, but roost and breed elsewhere. No successful production has been recorded in the Sanctuary within, at least, the past 10 years.

Because nene only occasionally frequent the area and do not appear to use it for nesting, it is possible to open the area to game mammal and turkey hunting during March through October, and game bird hunting with dogs during the regular bird season in November through January with some precautions. The state has implemented the following actions to protect nene that happen to be in the area during the general bird season: 1) establish, fence and post a 4 ha "No Hunting" safety zone around the nene/game bird feeder/water unit at the Ainahou Sanctuary; 2) conduct nene surveys in November and December to check for nene nesting activity in the area and close any area where nene are nesting (i.e. establish a "No Hunt" zone within 300 m radius of nest); 3) open the area to hunting only by permit and inform hunters of precautions and area closures when applying for the permit; 4) inform hunters of the possible presence of nene in the area and the restriction against take including precautions for dog handling; and 5) collect information on hunter activities at hunter checking stations and with field checks.

One endangered plant, *Plantago hawaiiensis*, may occur in the lease area. This species numbers more than 5,000 and has not been identified as needing emergency actions under the DOFAW-FWS Game/ES Compatibility Planning Process. The data for this location was reported in 1979 and additional information is needed to confirm its continued existence and assess needs for additional protective measures.

Portions of the Mauna Kea Forest Reserve and Public Hunting Area. The lease of 4,303 acres along the south central portion of the Mauna Kea Forest Reserve in the Humuula area provide for game mammal and game bird hunting in this area. These leased areas are within the Palila Critical Habitat. No listed plants are known in the lease areas and the lease for hunting purposes enables this area to be protected and managed for wildlife and forest habitat rather than pasture as are the adjacent lease areas. These areas are covered under the Court Ordered Sheep and Goat Eradication actions and included in aerial control operations twice a year.

With the above mitigative actions, leasing portions of the Kipuka Aina Hou Wildlife Sanctuary and the Mauna Kea Forest Reserve for wildlife management and public hunting purposes is not likely to adversely affect listed species.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

- a. Approve the Kipuka Aina Hou and Mauna Kea Forest Reserve land acquisition lease for wildlife management and game mammal hunting with the conditions that the State include the endangered plant, *Plantago hawaiiensis*, located in the Kipuka Aina Hou area as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine its status and identify needed protective measures and that the endangered plant will be fenced or otherwise protected if at risk from game mammals.
- b. Approve the Kipuka Aina Hou game land acquisition lease for game bird hunting as proposed with the condition that the state continue the current nene protective management actions to:
 - 1) conduct nene surveys in November and December to check for nene nesting activity in the area and close any area where nene are nesting (no hunt zone of 28 ha-300 m radius of nest);

- 2) open area to hunting by permit only and inform hunters of precautions and area closures when applying for permit;
- 3) inform hunters of the possible presence of nene in the area and the restriction against take including precautions for dog handling; and
- 4) collect information on hunter activities at hunter checking stations and random field checks.

State Reviewer: Paul J. Conry
Date: 11 April 2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
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The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 2

Project Number: W-23-GL:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Land Acquisition - Maui. To lease additional land for game management purposes on the Islands of Lanai and Maui. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Lanai Cooperative Game Management Area, Lanai and Kaonoulu Ranch, Maui. See Maui and Lanai reference maps in Appendix II.
3. **OBJECTIVES OF THE ACTION:** To Continue lease of 30,000 acres from the Lanai Company and 1,000 acres of Kaonoulu Ranch lands for game management purposes to provide public hunting opportunities on Lanai and Maui as per Lease Agreements.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Lanai and Maui. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data)

Lanai Cooperative Game Management Area. The lease area is heavily modified by years of cattle grazing and fire and is dominated by nonnative dry land scrub of Keawe and Koa Hale. The lease area is classified as badly degraded or highly altered in the DOFAW Vegetation Classification system. Leasing the 30,000 acres of private land on the island of Lanai will enable continuation of game mammal and bird hunting by a large numbers of hunters which will benefit listed plants by controlling the number of game mammals in the Cooperative Game Management Area. The entire lease area is zoned for Game Production under the DOFAW Game Animal Management Classification system and managed to produce quality axis deer and mouflon sheep hunting. If the area is not leased by the State for public hunting, it would likely be managed as a private fee hunting area which would result in much lower hunting pressure, harvests, and higher mammal populations in the area. Previous PR Game Habitat Management projects and Section 6 Endangered Plant projects have fenced individual endangered plants in the Lanai CGMA.

Six endangered plants may occur on the leased area of the island, *Tetramolopium remyi*, *Vigna owahuensis*, *Santalum frecinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, and possibly *Sesbania tomentosa*. Populations of *Tetramolopium remyi*, and *Hibiscus brackinridgii* and some *Abutilon menziesii* have been fenced. Additional information is needed to confirm the status of the these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if determined to be at risk from game mammals.

With the above mitigative measures, the lease of the Lanai Cooperative Game Management Area is not likely to adversely affect listed species.

Kaonoulu Ranch. The Kaonoulu Ranch Cooperative Game Management lease area is classified as a "Mixed Game and Other Uses" area under the DOFAW Game Animal Management Classification system. Production of game is integrated with other uses in this area. The lease area is an active cattle ranch with its lower elevations dominated by nonnative dry land scrub of Keawe and Koa Hale. Vegetation in the lower half of the area is classified as Considerably Disturbed or Badly Degraded. The upper half of the area has relatively intact communities with native plants. Leasing the 1,000 acres of private land will enable continuation of game mammal and bird hunting on this private land and thereby help to control the number of game mammals on the Ranch.

One endangered plant, *Geranium arboreum*, may occur at two locations in "badly degraded" habitat in the lease area. Additional information is needed to confirm the status of these individuals and assess needs for protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if determined to be at risk from game mammals.

With the above mitigative measures, the lease of the Kaonoulu Ranch Cooperative Game Management Area is not likely to adversely affect these listed species.

6. CONCLUSION: (circle one)

a. No Effect

b. May Affect

1) not likely to adversely affect

2) is likely to adversely affect

3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Lanai Cooperative Game Management Area and Kaonoulu Ranch Cooperative Game Management Area land acquisition lease for wildlife management and game mammal and bird hunting with the conditions that the State include the endangered plants *Tetramolopium remyi*, *Vigna owahuensis*, *Santalum frecinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, *Sesbania tomentosa* and *Geranium arboreum*, located in the lease areas as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants will be fenced or otherwise protected if at risk from game mammals.

State Reviewer: Paul J. Conry

Date: 11 April 2000

SECTION 7 EVALUATION FORM
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State: Hawaii

Project Number: W-24-GO: Project 1

- 1. NAME AND DESCRIPTION OF PROJECT:** Game Operations and Maintenance - East Hawaii.

To operate and maintain existing buildings, structures, and infrastructure for the game management program on East Hawaii for the period FY 2001-2005.

- 2. LOCATION(S):** (attach map) Fourteen Public Hunting Areas and DOFAW baseyard facilities at Hilo. See Hawaii reference map in Appendix I.

- 3. OBJECTIVES OF THE ACTION:** To operate and maintain buildings, structures, and infrastructure on 14 Public Hunting Areas totaling 465,499 acres to provide public hunting and other wildlife oriented recreation opportunities.

- 4. LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on the Island of Hawaii. See Appendix II for listed species.

- 5. EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) The operation of baseyards and facilities and the maintenance of existing baseyard buildings, hunter checking stations, fences, access roads and trails and signs are activities that are routine, previously conducted and repetitious in nature. Because the facilities and improvements are located in previously developed and maintained areas, these activities are not likely to adversely affect listed species.

Operation and maintenance of game bird feed and water units is an activity that may sustain and enhance populations of game mammals, depending on design. Unfenced water units can provide water to game mammals, cattle and game and nongame birds. In East Hawaii, there are no wildlife feed and water units in "Game Production" areas of the Upper Waiakea Forest Reserve or Public Hunting Units in the Hamakua Area. If wildlife feed and water units are developed in these areas, endangered plants occurring in the area will be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants in these areas will be fenced or otherwise protected if it is determined they are at risk from game mammals.

In areas under management as "Mixed Game and Other Uses", "Game Control" or "Staff Control" where game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection, wildlife feed and water units will be fenced or covered to exclude use by game mammals. Use by game birds is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species in East Hawaii.

- 6. CONCLUSION:** (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Operations and Maintenance - East Hawaii with the conditions that:

- 1) Wildlife feed and water units in public hunting areas classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control” be fenced or covered to exclude use by game mammals.
- 2) If wildlife feed and water units are developed in “Game Production” areas, any endangered plants in those areas will be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and those endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals.

State Reviewer: Paul J. Conry
Date: April 17, 2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

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State: Hawaii

Project Number: W-24-GO: Project 2

- 1. NAME AND DESCRIPTION OF PROJECT:** Game Operations and Maintenance - West Hawaii.
To operate and maintain existing buildings, structures, and infrastructure for the game management program on West Hawaii for the period FY 2001-2005.
- 2. LOCATION(S):** (attach map) Twenty-three Public Hunting Areas and DOFAW baseyard facilities at Pohakuloa and Kamuela. See Hawaii reference map in Appendix I.
- 3. OBJECTIVES OF THE ACTION:** To operate and maintain buildings, structures, and infrastructure on 23 Public Hunting Areas totaling over 250,000 acres to provide public hunting and other wildlife oriented recreation opportunities.
- 4. LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on the Island of Hawaii. See Appendix II for listed species.
- 5. EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data)) The operation of baseyards and facilities and the maintenance of existing baseyard buildings, hunter checking stations, fences, waterlines, access roads and trails and signs are activities that are routine, previously conducted and repetitious in nature. Because the facilities and improvements are located in previously developed and maintained areas, these activities are not likely to adversely affect listed species.

Operation and maintenance of game bird feed and water units is an activity that may sustain and enhance populations of game mammals, depending on design. Unfenced water units can provide water to game mammals, cattle and game and nongame birds. Water units in "Game Production" areas of Puuanahulu and Puuwaawaa Cooperative GMA may be used by both game mammals and game birds. Nine listed plants (*Caesalpinia kavaensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum v. tom.*, *Kokia drynarioides*, *Nothocestrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulacae sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum v. lept.* and *Exocarpus gaudichaudii*) may occur in these areas. Additional information is needed to confirm the status of these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if it is determined they are at risk from game mammals.

In areas under management as "Mixed Game and Other Uses", "Game Control" or "Staff Control" where game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection, wildlife feed and water units will be fenced or covered to exclude use by game mammals. Use by game birds is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species in West Hawaii.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Operations and Maintenance - West Hawaii with the conditions that:

- 1) The State include the nine endangered plants (*Caesalpinia kavaiensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum v. tom.*, *Kokia drynarioides*, *Nothocestrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulaea sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum v. lept.* and *Exocarpus gaudichaudii*) located in the Puuanahulu GMA and Puuwaawaa CGMA as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and that endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals.
- 2) That wildlife feed and water units in public hunting areas classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control” be fenced or covered to exclude use by game mammals

State Reviewer: Paul J. Conry

Date: April 17, 2000

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State: Hawaii

Project Number: W-24-GO: Project 3

1. **NAME AND DESCRIPTION OF PROJECT:** Game Operations and Maintenance Maui. To operate and maintain existing buildings, structures, and infrastructure for the game management program on Maui, Molokai and Lanai. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Twenty three Public Hunting Areas and DOFAW Baseyards facilities at Kahului, Kaunakakai, and Lanai City. See Maui, Molokai and Lanai reference maps - Appendix I.
3. **OBJECTIVES OF THE ACTION:** To operate and maintain buildings, structures, and infrastructure on 23 Public Hunting Areas totaling 63,800 acres to provide public hunting and other wildlife oriented recreation opportunities.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on the Islands of Maui, Molokai and Lanai. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) a) The operation of baseyards and facilities and the maintenance of existing baseyard buildings, hunter checking stations, fences, waterlines, access roads and trails and signs are activities that are routine, previously conducted and repetitious in nature. Because the facilities and improvements are located in previously developed and maintained areas, these activities are not likely to adversely affect listed species.
b) Operation and maintenance of wildlife water units is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units.
Island of Maui. All the Public Hunting Areas on Maui are classified as "Mixed Game and Other Uses", "Game Control" or "Staff Control" for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife water units in these areas will be fenced or covered to exclude use by game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.
With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species on the Island of Maui.
Island of Molokai. All the Public Hunting Areas on Molokai are classified as "Mixed Game and Other Uses", "Game Control" or "Staff Control" for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife water units in these areas will be fenced or covered to exclude

use by game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species on the Island of Molokai.

Island of Lanai. The Lanai Cooperative Game Management Area is classified as a “Game Production” area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in this area. Water units in this area may be used by both game mammals and game birds. Six endangered plants may occur on the Lanai Cooperative Game Management Area, *Tetramolopium remyi*, *Vigna owahuensis*, *Santalum frecinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, and possibly *Sesbania tomentosa*. *Tetramolopium remyi*, *Hibiscus brackinridgii* and some *Abutilon menziesii* have been fenced. Additional information is needed to confirm the status of these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species on the Island of Lanai.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Operations and Maintenance – Maui County with the conditions that:

- 1) The State include the 6 listed plants (*Tetramolopium remyi*, *Vigna owahuensis*, *Santalum frecinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, and possibly *Sesbania tomentosa*) located in “Game Production” Public Hunting Areas on Lanai as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and that endangered plants be fenced or otherwise protected if it is determined that they are at risk from game mammals.
- 2) That wildlife water units in public hunting areas on Maui and Molokai, classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control”, be fenced or covered to exclude use by game mammals.

State Reviewer: Paul J. Conry
Date: April 17, 2000

SECTION 7 EVALUATION FORM
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State: Hawaii

Project Number: W-24-GO: Project 4

1. **NAME AND DESCRIPTION OF PROJECT:** Game Operations and Maintenance Oahu. To operate and maintain existing buildings, structures, and infrastructure for the game management program on Oahu for the period FY 2001-2005.
2. **LOCATION(S):** (attach map) Fourteen Public Hunting Areas, Kuaokala Game Management Area, DOFAW Makiki Baseyard, and DOFAW Kawainui Satellite Baseyard, Island of Oahu. See Oahu reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To operate and maintain buildings, structures, and infrastructure on 14 Public Hunting Areas (PHA) and one Game Management Area (GMA), totaling 32,000 acres, to provide public hunting and other wildlife oriented recreation opportunities.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on the Island of Oahu. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) a) The operation of baseyards and facilities and the maintenance of existing baseyard buildings, hunter checking stations, fences, access roads and trails and signs are activities that are routine, previously conducted and repetitious in nature. Because the facilities and improvements are located in previously developed and maintained areas, these activities are not likely to adversely affect listed species.
b) Operation and maintenance of wildlife feed and water units is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced or open water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units.
Kuaokala Game Management Area. The Kuaokala Game Management Area is classified as a "Game Production" area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in this area. Wildlife feed and water units in this area may be used by both game mammals and game birds. No listed threatened or endangered species occur in this hunting area. Use of these wildlife feed and water units by game birds is not likely to adversely affect listed species.
All other Public Hunting Areas on Oahu are classified as "Mixed Game and Other Uses", "Game Control" or "Staff Control" for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife feed and water units in these areas will be fenced or covered to exclude use by game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species on Oahu.

6. CONCLUSION: (circle one)

a. No Effect

b. May Affect

1) not likely to adversely affect

2) is likely to adversely affect

3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Operations and Maintenance – Oahu with the conditions that wildlife feed and water units in public hunting areas classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control”, be fenced or covered to exclude use by game mammals.

State Reviewer: Paul J. Conry
Date: April 17, 2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii

Project Number: W-24-GO: Project 5

1. **NAME AND DESCRIPTION OF PROJECT:** Game Operations and Maintenance Kauai. To operate and maintain existing buildings, structures, and infrastructure for the game management program on Kauai for the period FY 2001-2005.
2. **LOCATION(S):** (attach map) Fourteen public hunting areas and the DOFAW baseyard facilities at Lihue. See Kauai reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To operate and maintain buildings, structures, and infrastructure on 14 public hunting areas totaling 111,391 acres to provide public hunting and other wildlife oriented recreation opportunities.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on the Island of Kauai. See Appendix II for the listed species.

6. **5.EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** activities that are routine, previously conducted and repetitious in nature. Because the facilities and improvements are located in previously developed and maintained areas, these activities are not likely to adversely affect listed species.

b) Operation and maintenance of wildlife water units is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced or open water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units.

Kekaha Game Management Areas, Mokihana Game Management Area, and the Wailua Game Management Area. The Kekaha Game Management Areas, Mokihana Game Management Area, and the Wailua Game Management Area are classified as a "Game Production" area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in these areas. Wildlife water units in these areas may be used by both game mammals and game birds. No listed threatened or endangered species occur in this hunting area. Use of these wildlife water units by game birds and mammals is not likely to adversely affect listed species.

Puu Ka Pele Forest Reserve. The Puu Ka Pele Forest Reserve is classified as a "Game Production" area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in these areas. Wildlife water units in these areas may be used by both game mammals and game birds in these areas. Eleven endangered plants (*Wilkesia hobyi*, *Lobelia niihauensis*, *Schiedea apokremnos*, *Heydyotis st.-johnii*, *Wolastonia fauriei*, *Euphorbia haeleeleana*, *Pteralyxia kauaiensis*, *Alectryon macrococcus v. macro*, *Isodendron laurifolium*, *Remya kauaiensis*, *Poa siphonoglossa*) and one species of concern (*Capparis sandwichiana*) may occur in these areas. Additional information is needed to confirm the status of these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process.

Endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

All other Public Hunting Areas on Kauai are classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control” for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife water units in these areas will be fenced or covered to exclude use by game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

With the above mitigative measures, the operations and maintenance of game facilities is not likely to adversely affect listed species on Kauai.

6. CONCLUSION: (circle one)

a. No Effect

b. May Affect

1) not likely to adversely affect

2) is likely to adversely affect

3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Operations and Maintenance – Kauai with the conditions that:

- 1) The State include the 11 endangered plants (*Wilkesia hobydi*, *Lobelia niihauensis*, *Schiedea apokremnos*, *Heydyotis st.-johnii*, *Wolastonia fauriei*, *Euphorbia haeleeeleana*, *Pteralyxia kauaiensis*, *Alectryon macrococcus v. macro*, *Isodendendrion laurifolium*, *Remya kauaiensis*, *Poa siphonoglossa*) and the species of concern (*Capparis sandwichiana*) located in Puu Ka Pele Forest Reserve, as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and that these endangered plants be fenced or otherwise protected if it is determined that they are at risk from game mammals.
- 2) That wildlife water units in public hunting areas on Kauai, classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control”, be fenced or covered to exclude use by game mammals.

State Reviewer: Paul J. Conry

Date: April 17, 2000

SECTION 7 EVALUATION FORM

Region 1 - FY2001-2005

Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii

Project Number: W-25-GP:

Project 1

1. **NAME AND DESCRIPTION OF PROJECT:** Game Population Management – East Hawaii. To restore and enhance game bird populations in East Hawaii. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kapapala Cooperative GMA, Mauna Loa GMA and Kipuka Ainahou Public Hunting Area.
3. **OBJECTIVES OF THE ACTION:** To enhance reproduction and survival of game bird populations by reducing the numbers of mongooses, feral cats, rats and dogs in the Kapapala Cooperative GMA, Mauna Loa GMA and Kipuka Ainahou Public Hunting Area.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on Hawaii. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Reduction of mongoose, cat, rat and dog numbers in the Kapapala Cooperative GMA, Mauna Loa GMA and Kipuka Ainahou Public Hunting Area by using diphacinone bait stations and trapping will increase numbers of game birds in game management areas but will not likely adversely affect listed species. Diphacinone will be used in tamper proof bait stations to avoid nontargets and live traps will be set in areas they will not catch nene. Reduction of the numbers of mongooses, rats, cats and dogs will benefit endangered bird populations by reducing predation losses due to these predators. Reduction of rat numbers may benefit listed plant species by reducing seed predation.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)

Approve project as proposed with no need for modification.

State Reviewer: Paul J. Conry

Date: April 19,

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 2

Project Number: W-25-GP:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Population Management – West Hawaii. To restore and enhance game bird populations in Game Management and Public Hunting Areas in West Hawaii. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Puu Waawaa Cooperative Game Management Area, Mauna Kea, Kaohe and Puu Anahulu Game Management Areas and Kahua Special Permit Area.
3. **OBJECTIVES OF THE ACTION:** To enhance reproduction and survival of game bird populations by reducing the numbers of mongooses, feral cats, rats and dogs in the Puu Waawaa Cooperative Game Management Areas, Mauna Kea, Kaohe and Puu Anahulu Game Management Areas and Kahua Special Permit Area.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on Hawaii. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Reduction of mongoose, cat, rat and dog numbers in the Puu Waawaa Cooperative Game Management Areas, Mauna Kea, Kaohe and Puu Anahulu Game Management Areas and Kahua Special Permit Area by using diphacinone bait stations and trapping will increase numbers of game birds in game management areas but will not likely adversely affect listed species or Palila critical habitat. Diphacinone will be used in tamper proof bait stations to avoid nontargets and live traps will be set in areas they would not catch nene. Reduction of the numbers of mongooses, rats, cats and dogs will benefit endangered bird populations by reducing predation losses due to these predators. Reduction of rat numbers may benefit listed plants reducing seed predation and direct feeding on plants.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)

Approve project as proposed with no need for modification.

State Reviewer: Paul J. Conry

2000

Date: April 19,

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 3

Project Number: W-25-GP:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Population Management - Maui. To restore and enhance game bird populations in Game Management and Public Hunting Areas on Maui, Molokai and Lanai. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kahakuloa Game Management Areas on Maui, Lanai Cooperative Game Management Area and Molokai Forest Reserve Public Hunting Area. See Maui reference maps in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Enhance reproduction and survival of game birds by reducing the numbers of mongooses, cats, rats and dogs in select Game Management and Public Hunting Areas on Maui, Molokai and Lanai
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on Maui, Molokai and Lanai. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Reduction of mongoose, cat, rat and dog numbers in the) Kahakuloa Game Management Areas on Maui, Lanai Cooperative Game Management Area and Molokai Forest Reserve Public Hunting Area by trapping will increase numbers of game birds in game management areas, but will not likely adversely affect listed species. Reduction of rat numbers may benefit listed plant species by reducing seed predation.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)

Approve project as proposed with no need for modification.

State Reviewer: Paul J. Conry

Date: April 19,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 4

Project Number: W-25-GP:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Population Management - Oahu.
To enhance reproduction and survival of game bird populations in the Kuaokala GMA, Oahu by reducing predators. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Oahu Public Hunting Areas
3. **OBJECTIVES OF THE ACTION:** Enhance reproduction and survival of wild francolin, quail, pheasant, dove, and turkey populations by reducing the numbers of mongooses, cats, rats and dogs.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All listed species were considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Reduction of mongoose, cat, rat and dog numbers in select Public Hunting Areas on Oahu by use of diphacinone baited stations or trapping will not adversely affect listed species in the area. Diphacinone will be used in tamper proof bait stations to avoid nontargets. Reduction of Mongoose, cat and dog numbers in Kuaokala GMA will benefit endangered waterbirds in the adjacent Mokuleia Quarry and other nearby wetland habitats and Elepaio in the adjacent Mokuleia Forest Reserve by eliminating a source of predators that could move into or hunt through these areas. Because this project does not involve any vegetation modification, there will be no impacts to listed plant species. Reduction of rat numbers may benefit listed species by reducing seed predation.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J. Conry

Date: April 19,

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 5

Project Number: W-25-GP:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Stocking - Maui. To restore game bird populations in Kahakuloa Game Management Area by stocking with hen and cock Ring-necked pheasants. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kahakuloa Game Management Areas on Maui. See Maui reference maps in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To restore game bird populations in Kahakuloa Game Management Area by stocking with hen and cock Ring-necked pheasants.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** All federally listed species found on Maui. See Appendix II for listed species.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Release of locally produced game bird cock and hen pheasants will increase numbers of game birds in game bird management areas. Ring-necked pheasants currently occur in the release area, but in low numbers. This release will not be an introduction of a new species into this area. Release birds will be purchased from reputable game bird producers. All birds to be released will be examined and banded and only healthy birds will be purchased and released. The release of locally produced and healthy game birds is not likely to adversely affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)

Approve project as proposed with no need for modification.

State Reviewer: Paul J. Conry

Date: April 19,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 1

Project Number: W-26-GH:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Habitat Management – East Hawaii. To convert brushy and weedy non-native vegetation in select game management areas into productive game bird habitat. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kapapala and Ookala Cooperative Game Management Areas, Hawaii. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To convert 50 acres per year of brushy and weedy non-native vegetation in each of Kapapala and Ookala Cooperative GMAs into productive game bird habitat. Annually clear, plant with Bahia grass or cover legumes and fence 5-acre food plots in Kapapala Cooperative GMA.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Kapapala Cooperative GMA. The Kapapala Cooperative GMA is State land leased for cattle grazing with a provision for public hunting. The area has been heavily grazed in the past and is highly degraded. No listed plant species occur in the area. The vegetation control will include mowing and clearing with tractors to improve habitat for game birds. Five acre plots will be planted with game bird food crops such as Bahia grass or cover legumes and fenced. The vegetation control and food plots will improve the habitat for both game birds and a resident breeding population of nene. Cattle grazing will be used to control regrowth once areas have been cleared of rank vegetation. Improving habitat for game birds as proposed here is an activity that is not likely to adversely affect listed plant species.

Increasing game bird habitat may increase the amount of game bird hunting in the area, which may have an adverse affect on endangered nene, if a nene were shot or attacked by a hunting dog. Use of this area by nene is concentrated in the Ranch's lower pasture near Highway 11, which is designated a "No Hunting/No Dog" area. No breeding has been detected in the pasture or areas opened to hunting. The nene that use the Kapapala Ranch CGMA, breed in the Kau Desert section of Volcanoes National Park, across Highway 11, and move into the lower pasture of Kapapala Ranch, with their goslings, to feed and loaf. Adults and flighted subadults range throughout the Kau District, including Kau Desert, Volcanoes National Park, Volcanoes golf course, and are found on Kapapala Ranch intermittently.

The state has implemented the following actions to protect nene that happen to be in the area during the general bird season: 1) establish a "No Hunting/No Dog" safety zone in the lower pasture, 2) strict accounting of all dogs when hunters check in and

out, 3) conduct nene surveys in November and December to check for nene presence and nesting activity in the area, 4) establish a manned hunter check-in station, 4) require dogs to be leashed or confined in the no dog area, 5) inform hunters of the possible presence of nene in the area and the restriction against take including precautions for dog handling; and 6) collect information on nene sightings from hunters at hunter check-in stations. With the above mitigative actions, improving game bird habitat at Kapapala Cooperative GMA is not likely to adversely affect listed species.

Ookala Cooperative GMA. The 2,382-acre Ookala Cooperative GMA is state land leased for dairy cattle grazing with a provision for public hunting. The lease is abandoned sugar cane fields with old sugar and invasive weeds on flat areas and weedy, brushy vegetation in the gulches. The fields have been fenced and are being converted to pasture for dairy cattle. No listed plant species occur in the area. The vegetation control will include mowing and clearing with tractors to improve remove the rank vegetation. Cattle grazing will be used to control regrowth once areas have been cleared of rank vegetation. The pastures and edges will provide improved habitat for game birds. Improving habitat for game birds as proposed here is an activity that will not likely adversely affect listed species.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Habitat Management – East Hawaii project as proposed with the conditions that the state continue the current nene protective management actions to:

- 1) Establish a "No Hunting/No Dog" safety zone in the lower pasture.
- 2) Conduct nene surveys in November and December to check for nene presence and nesting activity in the area.
- 3) Operate a manned hunter check-in station when bird hunting is opened.
- 4) Require dogs to be leashed or confined in the no dog area and provide for strict accounting of all dogs when hunters check in and out.
- 5) Collect information on nene sightings from hunters at hunter check-in stations, and
- 6) Inform hunters of the possible presence of nene in the area and the restriction against take including precautions for dog handling.

State Reviewer: Paul J.

Conry

Date: April 20,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 2

Project Number: W-26-GH:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Habitat Management – West Hawaii. To plant trees to provide food and shelter for game animals and mowing rank grasses to improve habitat for game birds. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Puu Waawaa CGMA, Puu Anahulu GMA, and Kaohe GMA. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To plant 2,000-3,000 mamanae, pilo, naio and ulae trees and mow rank grasses in tree planting areas in Puu Waawaa CGMA and Puu Anahulu GMA to improve game mammal and game bird habitat, and to mow 15 acres of dense and undesirable vegetation in Kaohe GMA to improve game bird habitat.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Puuanahulu and Puuwaawaa Cooperative GMAs. The Puuanahulu and Puuwaawaa Cooperative GMAs are classified as “Game Production” areas for game birds and pigs and “Mixed Game and Other Uses” for sheep and goats under the DOFAW Game Animal Management Classification system. Production of game mammals is a primary objective or managed with other resources in these areas. Planting mamanae, pilo, naio and ulae as food and cover for game animals is an activity that can sustain and enhance populations of game mammals and may adversely affect endangered plants in these GMAs. Nine listed plants (*Caesalpinia kavaiensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum v. tom.*, *Kokia drynarioides*, *Nothoestrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulaea sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum v. lept.* and *Exocarpus gaudichaudii*) may occur in these areas. Additional information is needed to confirm the status of these species and assess needs for protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if it is determined they are at risk from game mammals. Planting native food and cover plants and mowing fountain grass to reduce fire threat will benefit all species in the area by maintaining forest cover and preventing future fires which can destroy endangered plants over large areas. Areas to be mowed will be surveyed to avoid any threatened and endangered species. With the above mitigative measures, this habitat management project is not likely to adversely affect listed species.

Kaohe GMA. Mowing 15 acres of dense vegetation in the Kaohe GMA will improve habitat for game birds. No listed plant species occur in the area to be mowed and these areas have been previously mowed. The mowing will also reduce the fire fuel load in this area

and reduce fire threat. Improving habitat for game birds as proposed is not likely to adversely affect listed species or Palila Critical Habitat.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

- 1) Approve the game bird habitat management activities as proposed with no need for modification.
- 2) Approve the game mammal habitat management activities as proposed with the conditions that the State include the nine endangered plants (*Caesalpina kavaiensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum* v. *tom.*, *Kokia drynarioides*, *Nothocestrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulacae sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum* v. *lept.* and *Exocarpus gaudichaudii*) located in the Puuanahulu GMA and Puuwaawaa CGMA as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. And that endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals.

State Reviewer: Paul J.

Conry

Date: April 20,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 3

Project Number: W-26-GH:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Habitat Management - Maui. To improve game bird habitat at Kahakuloa Game Management Area. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kahakuloa Game Management Area, Maui. See Maui reference map in Appendix II.
3. **OBJECTIVES OF THE ACTION:** To annually clear and maintain 30 acres of brushy and weedy non-native vegetation and plant desirable game bird food plants such as corn or cover legumes at Kahakuloa Game Management Area to improve habitat for doves, francolin, and pheasants.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Maui. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Clearing of 30 acres of non-native brush and weedy vegetation by tractor or small bulldozer and planting of desirable game bird food plants will be done in the Kahakuloa Game Management Area in an area that is badly degraded or highly altered with non-native vegetation. No endangered plants occur in the public hunting area. Areas to be mowed or cleared will be surveyed to avoid any threatened and endangered species. The mowing and planting of game bird food plants such as corn or cover legumes to improve game bird habitat in the Kahakuloa Game Management Area is not likely to adversely affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
 - a. Approve Project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 20,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 4

Project Number: W-26-GH:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Habitat Management - Oahu. To improve game bird habitat in Kuaokala GMA. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kuaokala GMA
3. **OBJECTIVES OF THE ACTION:** To convert 10 acres of brushy non-native vegetation to herbaceous game bird habitat per year in Kuaokala GMA, plant game bird food plants such as paspalum grass, corn or millet, maintain improved areas with cattle grazing and mowing, and construct 0.5 mi fencing per year to manage cattle to maintain enhanced areas.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Oahu. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Kuaokala GMA has a history of heavy cattle grazing, fire and other vegetation modification to the extent that it is now dominated by non-native grasses and weedy shrubs. Project activities will be to install additional fencing to manage cattle, mow strips through brushy non-native vegetation to open it up for game birds, to collect food plant seeds and outplant seedlings that will provide food for game birds. Open areas will be maintained by mowing or cattle grazing. Fencing, mowing and planting will be done in areas that are badly degraded or highly altered with non-native vegetation. No endangered plants occur in the public hunting area. Areas to be mowed or cleared will be surveyed to avoid any threatened and endangered species. The mowing and planting of game bird food plants such as paspalum grass, corn or millet to improve game bird habitat in the Kuaokala Game Management Area is not likely to adversely affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

2000

Date: April 20,

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 5

Project Number: W-26-GH:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Habitat Management - Kauai. To convert 200 acres (40 acres per year) of brushy and weedy non-native vegetation in Kekaha Game Management Area into productive game bird habitat. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kekaha Game Management Area. See Kauai reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To clear, in contour strips, 200 acres of undesirable vegetation, plant with Bahia grass and/or bermuda grass within Kekaha Game Management Area and maintain it in good condition.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Kauai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) The Kekaha Game Management Area is heavily disturbed and dominated by non-native vegetation. Two hundred acres of non-native brush and weedy vegetation will be bulldozed or mowed and planted with game bird food plants such as Bahia grass and/or bermuda grass. Mowing and planting will be done in areas that are badly degraded or highly altered with non-native vegetation. No endangered plants occur in the public hunting area. Areas to be mowed or cleared will be surveyed to avoid any threatened and endangered species. The mowing and planting of game bird food plants to improve game bird habitat in the Kekaha Game Management Area and is not likely to adversely affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 20,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 1

Project Number: W-27-GF:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Facilities Construction-East Hawaii. To construct needed structures and infrastructure for the game management program on Hawaii. Project Period FY 2001-2005.
2. **LOCATION(S):** (attach map) Ookala and Kipuka Ainahou Game Management Areas (CGMA) and other public hunting areas throughout the island of Hawaii. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To construct a game bird water units (1/yr) at the Kapapala, Ookala and Kipuka Ainahou GMAs, one hunter checking station, and install 200 informational signs per year.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Construction, operation and maintenance of game bird water units is an activity that may sustain and enhance populations of game mammals and cattle, depending on design. Unfenced water units can provide water to game mammals and cattle and game and nongame birds and may affect listed species in the vicinity of these water units. Use by game birds of water and feed units is not likely to adversely affect listed species.
Kipuka Ainahou. The Kipuka Ainahou area is classified as "Staff Control" for sheep and goats and these game mammals are controlled for watershed and native resource protection. Wildlife water units will be built in this unit to enhance existing game bird numbers. Wildlife water units will be fenced or covered to exclude use by game mammals. Use by game birds is not likely to adversely affect listed species.
Kapapala and Ookala Cooperative GMAs. The Kapapala and Ookala Cooperative GMAs are Classified as game bird "Game Production" areas. Both areas are active cattle ranches and no listed plants occur in these hunting units. No listed plants occur in the Kapapala or Ookala Cooperative GMAs. Both areas are highly disturbed and leased for pasture. Construction and use of Game bird water units by game birds, wildlife and other animals is not likely to adversely affect listed species in these areas. If listed plants are located in the vicinity of water units, they will be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants in these areas will be fenced or otherwise protected if it is determined they are at risk from game mammals.
Hunter checking stations/signage. Construction of a hunter checking stations will be done at the Phia trail head providing access to hunting areas. Specific sites will be selected to avoid listed plant species in the area. Signs will be placed at strategic locations on

existing structures or erected with new materials. Because of the limited scope of proposed construction projects and avoidance of listed species in site location, proposed project actions are not likely to adversely affect listed species.

With the above mitigative measures, Game Facilities Construction is not likely to adversely affect listed species in East Hawaii.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve Game Facilities Construction - East Hawaii with the conditions that:

- 3) Wildlife water units in the Kipuka Ainahou GMA be fenced or covered to exclude use by game mammals.
- 4) If any listed plants are located in the vicinity of water units in the Ookala or Kapapala CGMA, they be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants in these areas will be fenced or otherwise protected if it is determined they are at risk from game mammals.
- 5) Building, signs, water units or other facilities be sited to avoid listed plants during construction.

State Reviewer: Paul J.

Conry

Date: April 24,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 2

Project Number: W-27-GF:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Facilities Construction-West Hawaii. To construct needed structures and infrastructure for the game management program on Hawaii. Project Period FY 2001-2005.
2. **LOCATION(S):** (attach map) Puu Waawaa CGMA and other public hunting areas throughout West Hawaii. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To install 2 miles of waterline and 26 game bird water units and cattle troughs in the Puuwaawaa , CGMA and install informational signs in other Public Hunting Areas on West Hawaii.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
6. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Construction, operation and maintenance of game bird water units is an activity that may sustain and enhance populations of game mammals and cattle, depending on design. Unfenced water units can provide water to game mammals and cattle and game and nongame birds and may affect listed species in the vicinity of these water units. Use by game birds of water and feed units is not likely to adversely affect listed species.
Puu Waawaa CGMA. Portions of Puu Waawaa CGMA are classified as "Game Production" and "Mixed Game and Other Uses" areas for game birds, sheep and goats and pigs. Wildlife water units will be built in these areas to enhance existing game bird numbers. Operation and maintenance of game bird water units is an activity that may sustain and enhance populations of game mammals and cattle, depending on design. Unfenced water units can provide water to game mammals, cattle and game and nongame birds. Water units in mammal "Game Production" areas of Puuwaawaa CGMA may be used by both game mammals, cattle and game birds. Nine listed plants (*Caesalpinia kavaiensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum v. tom.*, *Kokia drynarioides*, *Nothocestrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulaea sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum v. lept.* and *Exocarpus gaudichaudii*) may occur in these areas. Additional information is needed to confirm the status of these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected in the vicinity of these water units if it is determined they are at risk from game mammals or cattle. Use by game birds is not likely to adversely affect listed species.

In areas under management as “Mixed Game and Other Uses” where game mammals are managed to be compatible with other uses, wildlife water units will be fenced or covered to exclude use by game mammals and cattle. Use by game birds is not likely to adversely affect listed species.

Hunter signage. Signs will be placed at strategic locations on existing structures or erected with new materials. Because of the limited scope of proposed construction projects and avoidance of listed species in site selection, proposed project actions are not likely to adversely affect listed species.

With the above mitigative measures, Game Facilities Construction is not likely to adversely affect listed species in West Hawaii.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve Game Facilities Construction - West Hawaii with the conditions that:

- 3) The State include the nine endangered plants (*Caesalpinia kavaiensis*, *Colubrina oppositifolia*, *Zanthoxylum dipetalum v. tom.*, *Kokia drynarioides*, *Nothoecstrum breviflorum*, *Dlelissea undulata*, *Neraudia ovata*, *Portulaea sclerocarpa*, *Stenogyne angustifolia*) and two species of concern (*Tetramolopium consanguineum v. lept.* and *Exocarpus gaudichaudii*) located in the Puuwaawaa CGMA as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and that endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals.
- 4) That wildlife water units in the Puuwaawaa CGMA classified as “Mixed Game and Other Uses”, be fenced or covered to exclude use by game mammals.
- 5) Water units, signs or other facilities be sited to avoid listed plants during construction.

State Reviewer: Paul J.

Conry

Date: April 24,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 3

Project Number: W-27-GF:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Facilities Construction-Maui. To construct needed buildings, structures and infrastructure for the game management program on Maui, Molokai and Lanai. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kahakuloa Game Management Area and Kula Forest Reserve Maui, Molokai Forest Reserve public hunting area, Lanai Cooperative Game Management Area. See Maui reference maps in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To construct three hunter checking and 1 game bird water unit in the Molokai Forest Reserve public hunting area; construct 2 game bird water units on Maui, construct five pipeline trough game bird water units on Lanai, and put up hunter information signs in public hunting areas in Maui, Molokai and Lanai.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Maui, Molokai, and Lanai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) .Construction, operation and maintenance of wildlife water units is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units. Use by game birds of water and feed units is not likely to adversely affect listed species.

Island of Maui. All the Public Hunting Areas on Maui are classified as "Mixed Game and Other Uses", "Game Control" or "Staff Control" for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife water units in these areas will be fenced or covered to exclude use by game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

With the above mitigative measures, the Game Facilities Construction is not likely to adversely affect listed species on the Island of Maui.

Island of Molokai. All the Public Hunting Areas on Molokai are classified as "Mixed Game and Other Uses", "Game Control" or "Staff Control" for game mammals under the DOFAW Game Animal Management Classification system. In these areas, game mammals are managed to be compatible with other uses or controlled for watershed and native resource protection. Wildlife water units in these areas will be fenced or covered to exclude use by game mammals. A site survey will be conducted before water units are located in

order to avoid listed plants. Use by game birds of water and feed units is not likely to adversely affect listed species.

Drop Box Type Hunter Checking Station/Signs. Signs and Drop Box Type Hunter Checking Stations are small (size of a large mail box) and can be constructed with only very minor or no disturbance at the site of installation. A site survey will be conducted before hunter checking station sites are selected in order to avoid listed plants. Because of the limited scope of construction activities and avoidance of listed species in site location, proposed construction actions are not likely to adversely affect listed species.

With the above mitigative measures, Game Facilities Construction is not likely to adversely affect listed species on the Island of Molokai.

Island of Lanai. The Lanai Cooperative Game Management Area is classified as a “Game Production” area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in this area. Water units in this area may be used by both game mammals and game birds. Six endangered plants may occur on the Lanai Cooperative Game Management Area, *Tetramolopium remyi*, *Vigna owahuensis*, *Santalum freycinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, and possibly *Sesbania tomentosa*. *Tetramolopium remyi*, *Hibiscus brackinridgii* and some *Abutilon menziesii* have been fenced. Additional information is needed to confirm the status of these species and assess needs for additional protective measures. Identifying the status and implementing protective measures will be a priority for the DOFAW-FWS Game/ES Compatibility Planning Process. Endangered plants will be fenced or otherwise protected if it is determined that they are at risk from game mammals. Use by game birds of water and feed units is not likely to adversely affect listed species.

Construction of 5 game bird trough water units will be done in disturbed areas such as pasture, roadside, or previously clear and used areas and not involve clearing of new sites. A site survey will be conducted before water units sites are selected in order to avoid listed species. Because of the limited scope of proposed construction projects and avoidance of listed species in site location, proposed project actions are not likely to adversely affect listed species.

With the above mitigative measures, the Game Facilities Construction is not likely to adversely affect listed species on the Island of Lanai.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Facilities Construction – Maui County with the conditions that:

- 3) The State include the 6 listed plants (*Tetramolopium remyi*, *Vigna owahuensis*, *Santalum freycinetianum*, *Abutilon menziesii*, *Hibiscus brackinridgii*, and possibly *Sesbania tomentosa*) located in “Game Production” Public Hunting Areas on Lanai as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures and that endangered plants be fenced or otherwise protected if it is determined that they are at risk from game mammals.
- 4) That wildlife water units in public hunting areas on Maui and Molokai, classified as “Mixed Game and Other Uses”, “Game Control” or “Staff Control”, be fenced or covered to exclude use by game mammals.

- 5) Water units, check stations, signs or other facilities be sited to avoid listed plants during construction

State Reviewer: Paul J.

Conry

Date: April 24,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 4

Project Number: W-27-GF:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Facilities Construction-Oahu. To construct needed structures and infrastructure for the game management program on Oahu. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Storage Units at Makiki and Kuaokala GMA, Game bird feed and water stations-Kuaokala GMA; hunter check stations-public hunting areas. See Oahu reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To construct 5 game bird water and feed stations, and 5 hunter checking stations and storage facilities at baseyards.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Oahu. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Construction, operation and maintenance of wildlife feed and water units is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced or open water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units. Use by game birds of water and feed units is not likely to adversely affect listed species.

Kuaokala Game Management Area. The Kuaokala Game Management Area is classified as a "Game Production" area under the DOWAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in this area. Wildlife feed and water units will be fenced to exclude game mammals. No listed threatened or endangered species occur in this hunting area. Use of these wildlife feed and water units by game birds is not likely to adversely affect listed species.

Hunter Checking Stations. Mail Box Type Hunter Checking Stations are small (size of a large mail box) and can be constructed with no disturbance at the site of installation. A site survey will be conducted before hunter checking station sites are selected in order to avoid listed plants. Because of the limited scope of proposed construction projects and avoidance of listed species in site location, proposed project actions are not likely to adversely affect listed species.

Storage Facilities. New storage facilities consisting of preconstructed steel shipping containers and additional roofing material will be constructed at Makiki and Kuaokala GMA baseyard locations. Construction will be located in previously cleared areas. A site survey will be conducted before storage sites are selected in order to avoid listed plants. Because of the limited scope of proposed construction projects and avoidance of listed species in site location, proposed project actions are not likely to adversely affect listed species.

With the above mitigative measures, Game Facilities Construction is not likely to adversely affect listed species on Oahu.

6. CONCLUSION: (circle one)

a. No Effect

b. May Affect

1) not likely to adversely affect

2) is likely to adversely affect

3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Facilities Construction - Oahu with the conditions that water units, check stations, storage or other facilities be sited to avoid listed plants during construction.

State Reviewer: Paul J.

Conry

Date: April 24,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 5

Project Number: W-27-GF:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Facilities Construction-Kauai. To construct needed structures and infrastructure for the game management program on Kauai. Project period FY 2001-2005.
2. **LOCATION(S):** (attach map) Kekaha and Mokihana Ridge Game Management Areas. See Kauai reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To replace a 20,000 gal water storage tank and waterlines, construct 3 campsites, construct and post 500 (100/yr.) hunter information signs, and construct 0.3 miles of exclosure fencing around endangered plants.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Kauai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Construction, operation and maintenance of wildlife watering system is an activity that may sustain and enhance populations of game mammals, depending on design of the unit. Unfenced or open water units can provide water to game mammals, cattle and game and nongame birds and may affect listed species in the vicinity of these water units. Use by game birds of water units is not likely to adversely affect listed species.

Kekaha Game Management Area. The Kekaha Game Management Area is classified as a "Game Production" area under the DOFAW Game Animal Management Classification system. Production of game birds and mammals is a primary objective in this area. Wildlife watering system in this area may be used by both game mammals and game birds. No listed threatened or endangered species occur in this hunting area. Use of these wildlife water units by game birds and mammals is not likely to adversely affect listed species. If any endangered plants are located in the vicinity of the watering units, they will be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants in the vicinity of these water system replacement will be fenced or otherwise protected if it is determined they are at risk from game mammals.

Hunter Campsites/Composting Toilet/Cattle Guard and Gates/Exclosure Fencing. Hunter access and camping facilities will be constructed to increase hunting pressure in remote areas. New campsites will be located along the existing Mokihana Ridge trail in already disturbed sites. A site survey will be conducted before campsite and are selected in order to avoid listed species. Exclosure fencing will be constructed around pockets of endangered plants at a safe distance to avoid physical damage during the construction process. Cattle guards, gates and fencing will be constructed along the existing roadway, an area that is already heavily disturbed. A site survey will be conducted to avoid listed plants. Because of

the limited scope of proposed construction projects, location in heavily disturbed and modified areas and avoidance of listed species in site location, proposed project actions are not likely to adversely affect listed species.

6. CONCLUSION: (circle one)

- a. No Effect
- b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat

7. RECOMMENDATION: (include action modifications)

Approve the Game Facilities Construction – Kauai with the conditions that:

- 1) If any endangered plants are located in the vicinity of the watering units in the Kekaha GMA, they will be included as part of the DOFAW-FWS Game/ES Compatibility Planning Process to determine their status and identify needed protective measures. Endangered plants in the vicinity of these improvements will be fenced or otherwise protected if it is determined they are at risk from game mammals.
- 2) Water system replacement, hunter campsites, composting toilets, cattle guards and gates, enclosure fencing or other facilities be sited to avoid listed plants during construction

State Reviewer: Paul J.

Conry

Date: April 24,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
1

Project Number: W-28-GS: Project 1, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Mammal Surveys - East Hawaii. To determine game mammal population status, habitat condition, and hunter participation and success in public hunting areas on Hawaii. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Public hunting areas in East Hawaii District. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success and trends of game mammals in key public hunting areas on Hawaii; monitor diseases and parasitism in game mammals; monitor habitat condition and assess game mammal carrying capacity in existing and new public hunting areas; and determine game mammal hunter pressure and success, and the effects of hunting on game mammal distribution and numbers.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting aerial surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
2

Project Number: W-28-GS: Project 1, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Mammal Surveys - West Hawaii. To determine game mammal population status, habitat condition, and hunter participation and success in public hunting areas on Hawaii. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Public hunting areas in West Hawaii District. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success and trends of game mammals in key public hunting areas on Hawaii; monitor diseases and parasitism in game mammals; monitor habitat condition and assess game mammal carrying capacity in existing and new public hunting areas; and determine game mammal hunter pressure and success, and the effects of hunting on game mammal distribution and numbers.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting aerial surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely effect
 - 2) is likely to adversely effect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
3

Project Number: W-28-GS: Project 1, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Mammal Surveys-Maui. To determine game mammal population status, habitat condition, and hunter participation and success in public hunting areas on Maui, Molokai and Lanai. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Twenty-three public hunting areas on Maui, Molokai and Lanai. See Maui reference maps in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success, and trends of game mammals in public hunting areas on Maui, Molokai and Lanai; monitor diseases and parasitism in game mammals; monitor habitat condition; determine hunter pressure and success, and the effects of hunting on game mammal distribution and numbers; and monitor the effects of weather and habitat improvements on game mammal numbers.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Maui, Molokai and Lanai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting aerial surveys, walking along existing trails and transects recording observations, radio telemetry studies on game mammals, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely effect
 - 2) is likely to adversely effect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
4

Project Number: W-28-GS: Project 1, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Mammal Surveys -Oahu. To determine game mammal population status, habitat condition, and hunter participation and success in public hunting areas on Oahu. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Fourteen public hunting areas and two Game Management Areas on Oahu. See Oahu reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine hunter participation and hunter success in 14 PHAs and two GMAs on Oahu, monitor range conditions, and determine game mammal population status in hunting areas.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Oahu. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting aerial surveys, walking along existing trails and transects recording observations, radio telemetry studies on game animals, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
5

Project Number: W-28-GS: Project 1, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Mammal Surveys -Kauai. To determine game mammal population status, habitat condition, and hunter participation and success in public hunting areas on Kauai. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Fourteen public hunting areas on Kauai. See Kauai reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine hunter participation and hunter success in 14 public hunting areas on Kauai; monitor game mammal populations, range conditions via range surveys and exclosures, and hunter effort and success.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Kauai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting aerial surveys, walking along existing trails and transects recording observations, collecting observations at game exclosures, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
1

Project Number: W-28-GS: Project 2, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Surveys - East Hawaii. To determine game bird population status, habitat condition, and hunter participation and success in public hunting areas on Hawaii. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Public hunting areas in East Hawaii District. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success and trends of game birds in key public hunting areas on Hawaii; monitor diseases and parasitism in game birds; monitor habitat condition; and determine game bird hunter pressure and success, and survey for new areas as PHAs.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
2

Project Number: W-28-GS: Project 2, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Surveys - West Hawaii. To determine game bird population status, habitat condition, and hunter participation and success in public hunting areas on Hawaii. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Public hunting areas in West Hawaii District. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success and trends of game birds in key public hunting areas on Hawaii; monitor diseases and parasitism in game birds; monitor habitat condition; and determine game bird hunter pressure and success, and the success of habitat improvement and predator control programs.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely effect
 - 2) is likely to adversely effect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
3

Project Number: W-28-GS: Project 2, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Surveys -Maui. To determine game bird population status, habitat condition, and hunter participation and success in public hunting areas on Maui, Molokai and Lanai. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Twenty-three public hunting areas on Maui, Molokai and Lanai. See Maui reference maps in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine the status and distribution, reproductive success, and trends of game birds in public hunting areas on Maui, Molokai and Lanai; monitor diseases and parasitism in game birds; monitor habitat condition; determine hunter pressure and success, and the effects of hunting on game bird distribution and numbers; and monitor the effects of weather and habitat improvements on game bird numbers.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Maui, Molokai and Lanai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely effect
 - 2) is likely to adversely effect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
4

Project Number: W-28-GS: Project 2, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Surveys -Oahu. To determine game bird population status, habitat condition, and hunter participation and success in public hunting areas on Oahu. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Fourteen public hunting areas and two Game Management Areas on Oahu. See Oahu reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine hunter participation and hunter success in 2 PHAs and 1 GMA on Oahu, monitor game bird population distribution and abundance.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Oahu. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
5

Project Number: W-28-GS: Project 2, Job

1. **NAME AND DESCRIPTION OF PROJECT:** Game Bird Surveys -Kauai. To determine game bird population status, habitat condition, and hunter participation and success in public hunting areas on Kauai. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Fourteen public hunting areas on Kauai. See Kauai reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** Determine hunter participation and hunter success in public hunting areas on Kauai; monitor game bird populations, and investigate the causes of low productivity.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Kauai. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. conducting surveys, walking along existing trails and transects recording observations, examining game and collecting hunter information at checking stations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry
2000

Date: April 25,

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 1

Project Number: W-29-GR:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Research – Development of Ungulate Monitoring Techniques. To development a fast and effective ungulate monitoring techniques to be able to monitor game mammal abundance and their impacts to habitat on public hunting areas in the State of Hawaii. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Puuwaawaa Forest Bird Sanctuary. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To development and test a fast and effective ungulate monitoring techniques to be able to monitor game mammal abundance and their impacts to habitat on public hunting areas in the State of Hawaii. Field test research techniques in Puuwaawaa Forest Bird Sanctuary.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species listed on Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Field crews will utilize existing transects where possible. If new transects are added, they will be put in by hand with minimal vegetation cutting and clearing. Transects will be marked with flagging and repeatedly used. Because of the data collection, non-intrusive nature of the activities involved with this project; i.e. collecting field measurements of vegetation and animal sign, walking along existing trails and transects recording observations, the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely affect
 - 2) is likely to adversely affect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

SECTION 7 EVALUATION FORM
Region 1 - FY2001-2005
Federal Aid

The following evaluation form shall be completed and accompany each request for consultation. It may also be completed and kept on file, at the discretion of the Region, for actions where a "Will Not Affect" determination has been made.

State: Hawaii
Project 2

Project Number: W-29-GR:

1. **NAME AND DESCRIPTION OF PROJECT:** Game Research –Development of Techniques to Measure Hunter Effort and Success. To evaluate current methods of assessing hunter effort and success and develop new, more effective techniques as needed. Project period FY2001-2005.
2. **LOCATION(S):** (attach map) Statewide. See Hawaii reference map in Appendix I.
3. **OBJECTIVES OF THE ACTION:** To evaluate current methods of assessing hunter effort and success and develop new, more effective techniques as needed.
4. **LISTED SPECIES OR THEIR CRITICAL HABITATS CONSIDERED:** Plant and animal species in Hawaii. See Appendix II for the list of species considered.
5. **EXPLANATION OF IMPACTS OF ACTION ON LISTED SPECIES OR THEIR CRITICAL HABITATS:** (Attach supporting biological data) Because of the data collection and analytical nature of the activities involved with this project; i.e. collecting hunter information via checking stations, telephone surveys, mail surveys, etc., the proposed project will not affect listed species.
6. **CONCLUSION:** (circle one)
 - a. No Effect
 - b. May Affect
 - 1) not likely to adversely effect
 - 2) is likely to adversely effect
 - 3) likely to jeopardize/adverse modification of proposed species/critical habitat
7. **RECOMMENDATION:** (include action modifications)
Approve project as proposed with no need for modification.

State Reviewer: Paul J.

Conry

Date: April 25,

2000

Appendix IV

DOFAW Resource Management Guidelines

The basis of DOFAW's Resource Management Guidelines is the status of the native vegetation in an area. The character of the vegetation is classified as: "Most Pristine Native", "Predominantly Native", "Considerably Disturbed", or "Badly Degraded or Highly Altered". The vegetation status is then considered in conjunction with public safety, public demand for specific resources, and the effect of the proposed use on the vegetation.

Potential game management strategies have been divided into four categories, called Game Animal Management Classifications. These are:

Game Production. Game is a primary objective. Areas are managed for public hunting on a sustained-yield basis. Habitat may be manipulated for the purpose of increasing or maintaining the game carrying capacity of the habitat. Hunting seasons and bag limits are set to provide sustained public hunting opportunities and benefits. Some of the Game Management Areas are in this class.

Mixed Game and Other Uses. Production of game is an objective integrated with other uses such as hiking, production of forest products, and protection of native resources. Game populations are managed to acceptable levels using public hunting. Habitat manipulation for game enhancement may be conducted, but only when it is consistent with other uses. Seasons and bag limits are designed to ensure compatibility with other uses. These areas include portions of forest reserves and some Game Management Areas.

Game Control. Protection of resources is the primary objective, with emphasis on native plant community and watershed protection. Hunting is used to reduce animal impacts to those resources. Bag limits or seasons are liberal. These areas include watershed areas, portions of forest reserves, Natural Area Reserves, and wilderness preserves.

Staff Control. Areas designated for animal removal by staff or agency designees because of remoteness, environmental sensitivity, or public safety. Game mammal control is the objective. Control actions can include but are not limited to staff shooting or animal translocation. These areas include portions of forest reserves, Natural Area Reserves, wilderness reserves, and plant and wildlife sanctuaries.

Under DOFAW's Resource Management Guidelines, maintaining game bird populations is considered compatible with other uses in most areas. Game birds are managed for "Game Production" or "Mixed Game and Other Uses" in most areas. Because of potential detrimental effects of game mammals on native ecosystems, management strategy for game mammals is more complex. Areas managed for game mammal production, i.e. "Game Production", are located primarily in areas classified as "Badly Degraded or Highly Altered". These areas have a preponderance of weedy species, contain very few native plants, and are managed to produce game animals for recreational hunting. Under this management approach, known individuals or populations of listed plants are fenced or otherwise protected from feral ungulates. Areas classified as "Predominantly Native" and "Considerably Disturbed" are managed as "Mixed Game and Other Uses" for game mammals and have seasons and bag limits designed to ensure compatibility with other uses, including native ecosystem protection. Areas classified as "Most Pristine Native" are managed for "Game Control or Staff Control" and have the most liberal hunting seasons to minimize the pressure of feral animals on native ecosystems.