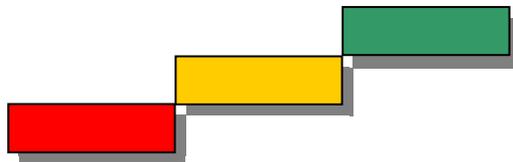


# **Navy and Marine Corps Natural Resources**

## **Metrics Builder Reference Guide**



Last Revised: May 14, 2009

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## **INTRODUCTION**

This document contains a summary of the Natural Resources Metrics Builder focus areas and associated definitions of key terms used in the Metrics Builder application.

In May 2004, the Naval Facilities Engineering Command (NAVFAC) was tasked to develop a metric system that would provide a better understanding of the Navy conservation program's relationship to installation missions and an indication of the success of partnerships with the USFWS and State fish and game agencies, with which the Navy develops and implements Integrated Natural Resource Management Plans.

The seven focus areas that will be evaluated annually by the INRMP evaluation team are designed to be an assessment of the following:

1. INRMP Project Implementation
2. Listed Species and Critical Habitat
3. Partnerships Effectiveness
4. Fish and Wildlife Management and Public Use
5. Team Adequacy
6. Ecosystem Integrity
7. INRMP Impact on the Installation Mission

Anyone interested in helping with further refinements of the Metrics Builder should contact their service branch representative.

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## BACKGROUND

### **WHO?**

Navy/Marine Corps Natural Resource Managers are responsible for ensuring that annual reviews of Integrated Natural Resource Management Plans (INRMPs) are conducted, documented and reported. The annual review is to be conducted in collaboration with the appropriate Installation Commander or Plans and Training Officer (POTO).

INRMPs shall be reviewed annually by installations in cooperation with the U.S. Fish and Wildlife Service (USFWS) and the State Fish and Wildlife agency(s).

### **WHAT?**

The Natural Resources Metrics Builder is a web-based application developed to support the gathering and reporting of essential information annually required by Congress, Executive Orders, existing U.S. laws, and the Department of Defense. This Metrics Builder is the Navy/Marine Corps' vehicle for facilitating and documenting the progress of the annual review and determining the overall health of the Navy/Marine Corps' Natural Resources program.

The annual reviews shall verify that:

- a. Current conservation metrics are available;
- b. All "must fund" projects and activities are on schedule;
- c. All required trained natural resources positions are filled or are in the process of being filled;
- d. Projects for the upcoming year have been identified and included in the INRMP;
- e. All required coordination has occurred;
- f. All significant changes to the installation's mission requirements or its natural resources have been identified; and
- g. The INRMP goals and objectives remain valid.

The Metrics Builder is composed of seven Focus Areas to help ensure the above requirements; goals and objectives of the Sikes Act are met and documented. Each of the seven Focus Areas contains criteria that can be evaluated. The criteria responses have weighted values applied and a 0-100 rating is calculated for the entire focus area. The 1 to 100 scores corresponds with a **Green (67-100)**, **Yellow (66-34)**, and **Red (33-0)** report card.

These Focus Areas include:

1. INRMP Project Implementation
2. Listed Species and Critical Habitat
3. Partnership Effectiveness
4. Fish and Wildlife Management and Public Use
5. Team Adequacy
6. Ecosystem Integrity
7. INRMP Impact on the Installation Mission

### **WHY?**

Under the Sikes Act Improvement Act (SAIA) of 1997, the ARNG must report to Congress on an annual basis, through HQDA and the Office of the Secretary of Defense (OSD) channels on the status of its Integrated Natural Resources Management Plans (INRMP). The first goal is to support and sustain the installation mission while complying with Federal laws, regulations,

ARNG policies, Executive Orders and other requirements. The Metrics Builder is designed to assist decision makers in assessing INRMP implementation and how well conservation efforts are being applied while ensuring no net loss of military training lands across the Navy/Marine Corps sites in the 54 States and Territories.

## PURPOSE

The Natural Resources Metrics Builder will make the process of reporting easier and more accurate. In addition, the annual review meeting and documentation of metrics will further encourage a working dialogue and good relationships with the U.S. Fish and Wildlife Services (USFWS) and the State Fish and Wildlife agencies. It should also encourage INRMP implementation and make the annual reporting process more efficient.

The following references provide guidance and explain the basis of our legal requirements and responsibilities under the Sikes Act to prepare, implement, and review INRMPs.

- a. Sikes Act (16 U.S.C. 670a et seq.)
- b. Sikes Act Improvement Act (SAIA) of 1997
- c. Memorandum, DAIM-ED-N, 21 Mar 97, subject: Army Goals and Implementing Guidance for Natural Resources Planning Level Surveys (PLS) and Integrated Natural Resources Management Plan.
- d. Memorandum, DUSD (ES)/EQ-CO, 21 Sep 98, subject: Implementation of Sikes Act Improvement Amendments.
- e. Department of Defense (DOD) Instruction 4715.3, USD(A&T), 3 May 96, subject: Environmental Conservation Program
- f. Memorandum, DUSD (I&E), 10 Oct 02, Subject: Updated Guidance for Implementation of the Sikes Act Improvement Act.
- g. Memorandum, DUSD (I&E), 1 Nov 04, Subject: Updated Guidance for Implementation of the Sikes Act Improvement Act – Supplemental Guidance Concerning INRMP Reviews.
- h. Memorandum, DUSD (I&E), 17 May 05, Subject: Updated Guidance for Implementation of the Sikes Act Improvement Act – Supplemental Guidance Concerning Leased Lands.

Additionally, this Metrics Builder will allow the Navy/Marine Corps to collect more accurate information in a variety of areas, including threatened and endangered species, habitat types, and program effectiveness across the natural resources program. Because each Navy/Marine Corps installation has an installation number (INSNO) we will also be able to geo-reference the information collected and utilize GIS techniques to better map and manage our resources.

## SCORECARDS

### #1 Assessment of INRMP Project Implementation Navy Installations

**Scorecard Objective:** Determine if INRMP projects are properly developed and entered into the system for resourcing. Document funding received, projects accomplished and whether they meet expectations.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities, issues to be addressed, and the surrounding circumstances.

Question	Response	Description
Is the Project in the EPRWeb?	Y/N	Has the project been entered into the EPRWeb/CompTRAK for the current fiscal year?
Was this project included in the POM?	Y/N	Was this project properly programmed in the POM cycle for the year of execution? If not included in the last POM, the answer would be No.
Has Project Funding been received?	0 – 5	<p>Did the installation/NRM receive the appropriate funding for this project?</p> <p>0: No funding            1: 1% to 25% funding            2: 26% to 50% funding            3: 51% to 76% funding            4: 76% to 100% funding            5: Received additional funding</p> <p>If you get \$15,000 as a lump sum to be spread over 3 years, then in year one, you get \$5,000, which is 100% of the funding for that FY, same for year 2 and 3. The answer for this question would be a 4 for each of the 3 years.</p>
Percent of project goals and objectives met	0 – 4	<p>For the current FY, identify percent of project goals and objectives completed.</p> <p>0: No goals/objectives completed            1: 1% to 25% goals/objectives completed            2: 26% to 50% goals/objectives completed            3: 51% to 76% goals/objectives completed            4: 76% to 100% goals/objectives completed</p> <p>Example: There is a project whose field work was scheduled for FY04, but the report isn't due to be completed until FY05. If the fieldwork was completed on time in FY04, then the score for this question would be a 4. In FY05, the project will be listed a second time. If the report was delivered on time, then the score will also be 4.</p>
Use of creative/ alternative resources for project accomplishments	Y/N/NA	<p>Use of resources other than or in addition to O&amp;M funding to accomplish the project (i.e. University, in-house, volunteers, SERDP, etc.).</p> <p>This is a bonus question. A score of "No" will not negatively affect your score.</p>

#1 Assessment of INRMP Project Implementation (Continued)  
 Navy Installations

Question	Response	Description
Is project accomplishment on schedule?	0 - 4	<p>Are project objectives/tasks on track as planned?</p> <p>Scores should reflect project status and accomplishments within the past fiscal year, regardless of overall completeness.</p> <p>0: No program area accomplishments completed            1: 1% to 25% program area accomplishments completed            2: 26% to 50% program area accomplishments completed            3: 51% to 76% program area accomplishments completed            4: 76% to 100% program area accomplishments completed</p>

## #1 Assessment of INRMP Project Implementation Navy Installations

> Follow these steps to ADD additional INRMP projects as necessary



- 1) Click on the "Add Projects" button
- 2) Next complete the project form
- 3) Add desired project list
- 4) Go back to scorecard and begin scoring process.

Question	Response	Description
Project Number	Text	Enter the project number, if known
Project Name	Text	Enter the project name.
Navy Assessment Level	0 - 5	These are the Navy Assessment Levels as defined in the Navy Environmental Requirements Guidebook.  Navy Level 1 (Legal Requirement) Navy Level 2 (Navy Policy) Navy Level 3 (Pending Regulation) Navy Level 4 (Future Requirements) Navy Level 5 (Stewardship Initiatives)

## #1 Assessment of INRMP Project Implementation - Marine Corps Installations Marine Corps Installations - Score Project Individually

**Scorecard Objective:** Determine if INRMP projects are properly developed and entered into the system for resourcing. Document funding received, projects accomplished and whether they meet expectations.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities, issues to be addressed, and the surrounding circumstances.

Question	Response	Description
Is the Project in CompTRAK?	Y/N	Has the project been entered into the CompTRAK for the current fiscal year?
Was this project included in the POM/CMEP?	Y/N	Was this project properly programmed in the CMEP cycle for the year of execution? If not included in the last CMEP, the answer would be No.
Has Project Funding been received?	0 – 5	Did the installation/NRM receive the appropriate funding for this project? 0: No funding 1: 1% to 25% funding 2: 26% to 50% funding 3: 51% to 76% funding 4: 76% to 100% funding 5: Received additional funding If you get \$15,000 as a lump sum to be spread over 3 years, then in year one, you get \$5,000, which is 100% of the funding for that FY, same for year 2 and 3. The answer for this question would be a 4 for each of the 3 years.
Percent of project goals and objectives met	0 – 4	For the current FY, identify percent of project goals and objectives completed.  0: No goals/objectives completed 1: 1% to 25% goals/objectives completed 2: 26% to 50% goals/objectives completed 3: 51% to 76% goals/objectives completed 4: 76% to 100% goals/objectives completed Example: There is a project whose field work was scheduled for FY04, but the report isn't due to be completed until FY05. If the fieldwork was completed on time in FY04, then the score for this question would be a 4. In FY05, the project will be listed a second time. If the report was delivered on time, then the score will also be 4.
Use of creative/ alternative resources for project accomplishment	Y/N/NA	Use of resources other than or in addition to O&M funding to accomplish the project (i.e. University, in-house, volunteers, SERDP, etc.).
Is project accomplishment on schedule?	0 - 4	Are project objectives/tasks on track as planned?  Scores should reflect project status and accomplishments within the past fiscal year, regardless of overall completeness.  0: No program area accomplishments completed 1: 1% to 25% program area accomplishments completed 2: 26% to 50% program area accomplishments completed 3: 51% to 76% program area accomplishments completed 4: 76% to 100% program area accomplishments completed

#1 Assessment of INRMP Project Implementation  
Marine Corps Installations - Score Project Individually

> Follow these steps to ADD additional INRMP projects as necessary

Question	Response	Description
Project Number	Text	Enter the project number, if known
Project Name	Text	Enter the project name.

#1 Assessment of INRMP Project Implementation - USMC  
 Marine Corps Installations - Score Project by Category

**Scorecard Objective:** Determine if INRMP projects are properly developed and entered into the system for resourcing. Document funding received, projects accomplished and whether they meet expectations.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities, issues to be addressed, and the surrounding circumstances.

Question	Response	Description
Are all projects in the CompTRAK?	Y/N	Have the projects in the program area been entered into the COMPTRAK for the current fiscal year?
Are all projects included in the CMEP?	Y/N	Were the projects in the program area properly programmed in the CMEP cycle for the year of execution? If they were all not included in the last CMEP, the answer would be No.
Has Project Funding been received?	0 – 5	<p>Did the installation/NRM receive the appropriate funding for projects in the program area?</p> <p>0: No funding            1: 1% to 25% funding            2: 26% to 50% funding            3: 51% to 76% funding            4: 76% to 100% funding            5: Received additional funding</p> <p>If you get \$15,000 as a lump sum to be spread over 3 years, then in year one, you get \$5,000, which is 100% of the funding for that FY, same for year 2 and 3. The answer for this question would be a 4 for each of the 3 years.</p>
Percent of project goals and objectives met	0 – 4	<p>For the current FY, identify percent of project goals and objectives completed for the program area.</p> <p>0: No goals/objectives completed            1: 1% to 25% goals/objectives completed            2: 26% to 50% goals/objectives completed            3: 51% to 76% goals/objectives completed            4: 76% to 100% goals/objectives completed</p> <p>Example: There is a project whose field work was scheduled for FY04, but the report isn't due to be completed until FY05. If the fieldwork was completed on time in FY04, then the score for this question would be a 4. In FY05, the project will be listed a second time. If the report was delivered on time, then the score will also be 4.</p>
Use of creative/ alternative resources for project accomplishment	Y/N/NA	<p>Use of resources other than or in addition to O&amp;M funding to accomplish the project (i.e. University, in-house, volunteers, SERDP, etc.).</p> <p>This is a bonus question. A score of "No" will not negatively affect your score.</p>

#1 Assessment of INRMP Project Implementation - USMC (Continued)  
 Marine Corps Installations - Score Project by Category

Question	Response	Description
Are the program area accomplishments on schedule?	0-4	<p>Are the program area objectives/tasks on track as planned?</p> <p>Scores should reflect project status and accomplishments within the past fiscal year, regardless of overall completeness.</p> <p>0: No program area accomplishments completed            1: 1% to 25% program area accomplishments completed            2: 26% to 50% program area accomplishments completed            3: 51% to 76% program area accomplishments completed            4: 76% to 100% program area accomplishments completed</p>

## #2 Assessment of Listed Species and Critical Habitat

**Scorecard Objective:** Determine if conservation efforts are effective and if the INRMP provides the conservation benefits necessary to preclude designation of critical habitat.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Have you mapped the location and/or use area of this species on your installation GIS?	Y/N	Has the habitat been mapped in GIS format for federally listed species?
To what extent are quantifiable goals, parameters, and monitoring requirements in place to assess conservation effectiveness?	NA, 0 - 4	How well are FWS species benefit recommendations/ conditions being met on the installation?  NA 0: None 1: Minimal 2: Moderate 3: Good 4: Excellent
To what degree have listed species projects been funded	NA, 0 - 4	If projects cover more than one species, address the applicability to each species accordingly.  NA 0: No funding 1: 1% to 25% funded 2: 26% to 50% funded 3: 51% to 75% funded 4: 76% to 100% funded
Do existing surveys provide adequate data on habitat conditions?	Y/N	Does the installation have adequate data on habitat conditions? It is assumed there is a survey. If there is no survey, then the answer would be "No".  Data adequacy is determined by USFWS and/or State protocols and/or standards and whether surveys are current and/or up- to-date  If you would like to clarify your response, please do so in the Findings and Recommendations..
Do existing surveys provide adequate data on population presence and numbers?	Y/N	Do surveys provide adequate data on population numbers?  Data adequacy is determined by USFWS and/or State protocols and/or standards and whether surveys are current and/or up- to-date  If you would like to clarify your response, please do so in the Findings and Recommendations.

<p>To what extent do INRMP projects &amp; programs provide a benefit to this species</p>	<p>NA, 0 - 4</p>	<p>Rate the level of benefit that INRMP projects have provided to this species as follows:</p> <p>NA</p> <p>0: No benefit</p> <p>1: Minor benefits (e.g. - invasive species removal, pest/disease prevention)</p> <p>2: Moderate benefit (e.g. - Habitat restoration/enhancement)</p> <p>3: Significant benefit (e.g. - combination of minor and moderate benefits)</p> <p>4: Major benefit (e.g. - Increased population, demonstrated recovery trends)</p> <p>If projects cover more than one species, address the applicability to each species accordingly.</p>
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## #2 Assessment of Listed Species - Adding Additional Species

Question	Response	Description
Species Name	Text	Has the habitat been mapped in GIS format for federally listed species?
Federal Status	Threatened Endangered Proposed Candidate	<ul style="list-style-type: none"> <li>• <b>Endangered</b> – A species in danger of becoming extinct throughout all or a significant portion of its range. Formally listed as Endangered under the Endangered Species Act of 1973.</li> <li>• <b>Threatened</b> – Any species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Formally listed as Threatened under the Endangered Species Act of 1973.</li> <li>• <b>Proposed</b> – A species that has been proposed for listing as endangered or threatened, for which a final determination of status is to be completed within 12 months</li> <li>• <b>Candidate</b> – Any species or subspecies or bird, mammal, fish, amphibian, reptile, or plant that is being considered for listing as endangered or threatened but is not yet the subject of a proposed rule.</li> </ul>

### #3 Assessment of Partnership Effectiveness

**Scorecard Objective:** INRMP team to determine if the partnership between them is cooperative and resulting in the effective implementation of the INRMP.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Program Areas	Check applicable program areas	Agriculture & Grazing BASH Chesapeake Bay Initiative Coastal America Commercial Forest Management Coral Reef Protection Ecological Monitoring Forest Stewardship Game Species Gulf of Mexico Initiative Invasive Species Control Migratory Bird Management Mojave Desert Initiative Non-Game Species Nuisance Animals Outdoor Recreation Opportunities Partners in Flight Planning Level Surveys Recreational Fisheries San Diego Bay Initiative Soil & Water Conservation Student Conservation Association T&E Species Program Watchable Wildlife Wetlands Urban Forestry * - Please see definitions on page
Support of FWS Regional Efforts	NA, 0 – 4	How well has the management of the program supported geographical USFWS objectives? Refer to local website for examples.  NA 0: Not supported 1: Minimally supported 2: Satisfactorily supported 3: Well supported 4: Very well supported

### #3 Assessment of Partnership Effectiveness (Continued)

Question	Response	Description
Support of State Conservation Plans	NA, 0 – 4	<p>How well has the management of the program supported State conservation plans and objectives? Refer to local website for examples.</p> <p>NA            0: Not supported            1: Minimally supported            2: Satisfactorily supported            3: Well supported            4: Very well supported</p>
Support of Other Conservation Initiatives	NA, 0 – 4	<p>How well has the management of the program supported other local/regional/national conservation initiatives? Include public/community initiatives such as PIF, Chesapeake Bay Initiative, local coral reef protection initiatives, Partners in Amphibian and Reptile Conservation.</p> <p>NA            0: Not supported            1: Minimally supported            2: Satisfactorily supported            3: Well supported            4: Very well supported</p>
Is there Adequate Collaboration between Partners?	0 – 4	<p>Rate the level of collaboration between Navy, USFWS, State and any other major partner. Do you meet regularly to discuss issues, get updates, and exchange information? Meetings do not have to be face-to-face.</p> <p>0: No collaboration            1: Minimal collaboration            2: Satisfactory collaboration            3: Effective collaboration            4: Highly effective collaboration</p>
Is there Satisfactory Cooperation between Partners?	0 – 4	<p>Rate the level of cooperation between Navy, USFWS, State and any other major partner. Cooperation refers to the combined action(s) taken towards common goals. Is there productive dialogue? Is there mutual agreement that results in projects being accomplished?</p> <p>0: No cooperation            1: Minimal cooperation            2: Satisfactory cooperation            3: Effective cooperation            4: Highly effective cooperative</p>
Is natural resources program execution meeting FWS & State expectations?	0 – 4	<p>How satisfied are your partners that you're meeting expectations?</p> <p>0: Dissatisfied            1: Minimally satisfied            2: Somewhat satisfied            3: Highly satisfied            4: Completely satisfied</p>

#### #4 Assessment of Fish & Wildlife Management and Public Use

**Scorecard Objective:** To rate the availability of public recreational opportunities such as fishing and hunting, given the existing security requirements for the installation.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Are sustainable harvest goals effective?	NA, 0 - 4	<p>To what extent was the sustainable harvest of plants, fish and wildlife populations through public recreational use effective in supporting ecosystem management goals? (i.e., deer off runway, healthy game populations, BASH reduction)</p> <p>NA</p> <p>0: Not effective (populations densities extreme, damage to the ecosystem)</p> <p>1: Minimal effectiveness (Over harvest, disruption to ecosystem balance)</p> <p>2: Moderate effectiveness (No improvement in the populations, management issues remain)</p> <p>3: Effective (Sustainable harvest achieved)</p> <p>4: Very effective (Sustainable harvest with improving ecosystem trends, and public recreational opportunities met)</p>
Availability of public recreational opportunities?	NA, 0 - 4	<p>Given safety and security constraints, to what extent were recreational activities such as bird watching, hiking, watchable wildlife programs made available to the public?</p> <p>NA</p> <p>0: No public access provided</p> <p>1: Low opportunities</p> <p>2: Moderate opportunities</p> <p>3: Good opportunities</p> <p>4: Excellent opportunities</p>
Was public outreach provided?	NA, 0 - 4	<p>To what extent did the installation develop and provide public outreach? (environmental educational opportunities, natural resource field trips/tours, pamphlets)</p> <p>NA</p> <p>0: No public outreach provided</p> <p>1: Low outreach</p> <p>2: Moderate outreach</p> <p>3: Good outreach</p> <p>4: Excellent outreach</p>

## #5 Assessment of Team Adequacy for Natural Resources Management

**Scorecard Objective:** Determine if the Natural Resources Team is adequately supported and appropriately trained to implement INRMPs.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Program Areas	Check applicable program areas	Agriculture & Grazing BASH Chesapeake Bay Initiative Coastal America Commercial Forest Management Coral Reef Protection Ecological Monitoring Forest Stewardship (non-commercial) Game Species Gulf Coastal Plain Ecosystem Partnership Gulf of Mexico Initiative Invasive Species Control Longleaf Alliance Migratory Bird Management Mojave Desert Initiative Non-Game Species Nuisance Animals Outdoor Recreation Opportunities Partners in Flight Planning Level Surveys Recreational Fisheries San Diego Bay Initiative Soil & Water Conservation Student Conservation Association T&E Species program Urban Forestry Watchable Wildlife Wetlands * - Please see definitions on page
Is there an on-site Navy/ Marine Corps Professional NRM?	NA/Y/N	Is there an adequately* trained government Natural Resources Manager located at the installation?

#5 Assessment of Team Adequacy for Natural Resources Management (Continued)

Question	Response	Description
Is there an Adequate Navy/Marine Corps NR Management?	NA/Y/N	<p>Are there enough natural resources professionals at the installation to meet current requirements? Members of the team do not have to be within the natural resources department.</p> <p>Yes No NA: Small installations may not require an on-site professional, but get their support from regional sources.</p>
Is NAVFAC & Regional Support Adequate?	NA, 0 – 4	<p>Has the installation received support from the NAVFAC Field Offices and/or Navy and Marine Corps Regional Commands, as needed?</p> <p>NA 0: No support 1: Minimal support 2: Satisfactory support 3: Well supported 4: Very well supported</p>
Is Contractor Support Adequate?	NA, 0 – 4	<p>Is contractor or other agency support adequately utilized to implement the INRMP? Do you use contractors to develop and implement the INRMP?</p> <p>NA 0: Not utilized 1: Minimally utilized 2: Satisfactorily utilized 3: Well utilized 4: Very well utilized</p>

### #5 Assessment of Team Adequacy for Natural Resources Management (Continued)

Question	Response	Description
Is FWS Support Adequate?	NA, 0 – 4	<p>Has the installation sought and received support from the local USFWS and State wildlife agencies, as needed?</p> <p>0: No support            1: Minimal support            2: Satisfactory support            3: Well supported            4: Very well supported</p>
Is State Support Adequate?	NA, 0 – 4	<p>Has the installation sought and received support from the local USFWS and State wildlife agencies, as needed?</p> <p>0: No support            1: Minimal support            2: Satisfactory support            3: Well supported            4: Very well supported</p>
Are Volunteers Adequately Utilized?	NA, 0 – 4	<p>To what extent are volunteers utilized to support the program?</p> <p>NA: Mission requirements preclude volunteers            0: Volunteers not utilized            1: Few volunteers are utilized            2: Enough volunteers are utilized            3: Many volunteers are utilized            4: Very many volunteers are utilized</p>
Is the team adequately trained to accomplish duties to ensure NR compliance?	0 – 4	<p>Are training needs being met in accordance with staff Individual Development Plans (IDP)?</p> <p>0: No training            1: Minimally trained            2: Moderately trained            3: Well trained            4: Very well trained</p>

## #6 Assessment of Ecosystem Integrity

**Scorecard Objective:** Concept is to develop a simple protocol, using "indicator species" or possibly just the review team's subjective reasoning and consensus to determine the integrity of the various installation habitats.

"Integrity" refers to quality of state of being complete, unbroken condition, wholeness, entirety, unimpaired, perfect condition, soundness.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Habitat	Check applicable habitat types	Agricultural Land Beaches & Dunes Brush Land Desert Forest Land Grasslands Nearshore Areas & Coral Reef Ponds & Lakes Riparian Areas Rivers & Streams Wetlands Urban Areas * - Please see definitions on page
General Team Consensus of Overall Ecological Integrity	NA, 0 – 4	Consensus rating of ecosystem condition by habitat type.  NA 0: No integrity 1: Low integrity 2: Medium integrity 3: High integrity 4: Very high integrity  Comparisons need to be made based on the potential natural community in concert with existing and proposed land uses
Status of Communities and Cover Types Indicators	NA, 0 – 4	If habitat indicator(s) is identified on the installation, what is the current population status/trend?  Habitat indicators will be determined by the NR Managers and/or the team.  NA 0: Poor 1: Fair 2: Good 3: Very good 4: Excellent

## #6 Assessment of Ecosystem Integrity (Continued)

Question	Response	Description
Specific Study/Project Results	NA, 0 – 4	<p>Results of any biological studies completed in the past year indicate the health of the habitat as:</p> <p>NA            0: Poor            1: Fair            2: Good            3: Very good            4: Excellent</p>
Communities and Cover Types Conversion Benefits	NA, 0 – 4	<p>Assess the benefit of any recent communities and cover type conversions? (i.e. loblolly pine to long-leaf pine, tame grass to natural prairie)</p> <p>NA            0: No habitat benefit            1: Few habitat benefits            2: Moderate habitat benefits            3: Significant habitat benefits            4: Very significant habitat benefits</p>
Communities and Cover Types Restoration Accomplishments	NA, 0 – 4	<p>Any recent enhancement/restoration of communities and cover type areas? If so, rate the value of the accomplishment(s)? If so, rate the value of the accomplishment(s)?</p> <p>NA            0: No value            1: Just Started            2: Low value            3: Medium value            4: High value</p>

## #7 Assessment of INRMP Impact on the Installation Mission

**Note: This focus area is to be completed by the installation commanding officer**

**Scorecard Objective:** This focus area is designed to measure the level to which existing Natural Resources compliance requirements and associated actions support the installations' ability to sustain the current operational mission.

The installation commanding Officer (or Training Officer Equivalent) is required to complete the signature box prior to final submittal.

Findings and recommendations are encouraged in order to provide a better understanding of existing activities and circumstances.

Question	Response	Description
Has Coordination between natural resources and operators been successful/ effective	0 - 4	<p>Does the natural resources team consult with operators when making changes to the INRMP in order to keep it current? Coordination examples include: maps, signage, pamphlets, other communications, orientations, meetings, training, etc.</p> <p>0: No coordination            1: Minimal coordination            2: Satisfactory coordination            3: Effective coordination            4: Highly effective coordination</p>
To what level do NR compliance requirements support the installation's ability to sustain the operational mission	0 - 4	<p>0: Cannot accomplish mission requirements            1: Meet mission requirements, but with significant work-arounds            2: Meet mission requirements, but with minimal work-arounds            3: Meet mission requirements, but with diminished value            4: Accomplish all mission requirements with no work-arounds</p>
Has there been a net loss of training lands?	0 - 4	<p>The Sikes act states that each INRMP shall, where appropriate and applicable, provide for no net loss in the capability of military installations lands to support the military mission of the installation. Has the implementation of the installation INRMP resulted in a net loss of lands to support the military mission?</p> <p>0: Yes, to such degree that a training activity could not be conducted on the base            1: Yes, the loss resulted in modification of the training so that it could be conducted on the base            2: Yes, a loss occurred but it only affects future training activities            3: No loss occurred            4: No loss occurred and the base was able to recover areas for training previously lost due to natural resource requirements.</p>

#7 Assessment of INRMP Impact on the Installation Mission (Continued)

Question	Response	Description
Does the Natural Resources program effectively consider current mission requirements	0 – 4	0: Strongly disagree 1: Disagree 2: Not sure (neutral) 3: Agree 4: Strongly agree

## Terms and Definitions

### Glossary of Terms

**Candidate Species:** Any species that is being considered by the Secretary of Interior or Commerce for listing under ESA as an endangered or a threatened species but is not yet the subject of a proposed Federal listing.

**Critical Habitat:** The geographic area on which are found those physical or biological features essential to the conservation of a species listed and published by the USFWS or NMFS under the authority of the ESA.

**Habitat:** An area where a plant or animal species lives, grows, and reproduces, and the environment that satisfies its life requirements.

**Integrated Natural Resources Management Plan (INRMP):** The INRMP is a long term planning document to guide the installation commander in the management of natural resources to support the installation mission, while protecting and enhancing installation resources for multiple use, sustainable yield, and biological integrity. The primary purpose of the INRMP is to ensure that natural resources conservation measures and military operations on the installation are integrated and consistent with stewardship and legal requirements.

**Natural Resources Management Professional (NRM):** Individual with an undergraduate or graduate degree from an accredited university in a natural resources-related science and who has the responsibility for managing natural resources on a regular basis.

**INRMP-Related Projects:** Includes studies, plans, surveys, inventories, and land/water treatments as well as physical improvements, minor construction, and public relations described in the INRMP.

**Proposed Species:** Any species of fish, wildlife or plant that is proposed in the Federal Register to be listed under section 4 of the ESA.

**Recovery Plan:** A blueprint for how a species will be recovered so that it now longer needs protection under the Endangered Species Act.

**State Listed Species:** Any species of fish, wildlife, or plant protected by an appropriate State agency as issued in a State's endangered species law and other pertinent regulations.

**Stewardship:** The responsibility to inventory, manage, conserve, protect, and enhance the natural resources entrusted to one's care in a way that respects the intrinsic value of those resources, and the needs of present and future generations.

## Program Area Definitions

**Agricultural & Grazing:** Use of non-excess DOD lands under a lease to an agency, organization, or person generally for growing crops or grazing domestic animals. The term "agriculture" includes activities related to producing, harvesting, processing, or marketing an agricultural, aquaculture, maricultural, or horticultural commodity, including the breeding, raising, shearing, feeding, caring for, training, and management of livestock, bees, poultry, fish, shellfish, and fur-bearing animals and wildlife, and the planting, cultivating for harvest, or processing short rotation (less than 15 years) forest products

**Bird Aircraft Strike Hazard (BASH):** Prevention Program: An integrated program, based on a BASH Plan, to support flight missions. This program promotes land management practices to minimize bird attractants, and safety procedures to recognize, control, and avoid hazardous bird concentrations. A critical part of the BASH Program involves disciplined reporting of bird strikes.

**Chesapeake Bay Initiative:** With the Chesapeake Bay Initiative Act of 1998, Congress recognized the interest in enhancing education and interpretation of the Bay, increasing public access and conserving natural and cultural resource sites. The Act authorizes technical and financial assistance for a network of gateways, water trails and other connections linking sites representing the many facets of the Bay's cultural and natural history.

For more information, please visit <http://www.nps.gov/phso/rtca/chesgate.htm>

**Coastal America:** Coastal America is a unique partnership of federal agencies, state and local governments, and private organizations. The partners work together to protect, preserve, and restore our nation's coasts.

The challenge is to meld the capabilities and expertise of all the partners to solve local coastal problems. This is accomplished by sharing information, pooling resources, and combining management skills and technical expertise. At Coastal America, it's all in the partnership.

The partnership accomplishes tasks that no one group could accomplish alone.

With federal, state, and local partners working together, there is a wealth of expertise and services available to Coastal America projects. This results in cost-effective, innovative solutions.

Coastal America exemplifies efficient and effective government.

**Commercial Forest Management:** Actions designed for the production and sale of forest products and for maintaining the health and vigor of forest ecosystems. Actions include timber management, forest administration, timber sales, reforestation, afforestation, timber stand improvement, timber access road construction and maintenance, forest protection, and other directly related functions; and for maintaining the health and vigor of forest ecosystems.

**Coral Reef Protection:** The coral reefs and related endemic mangrove and sea grass ecosystems are biologically rich and diverse habitats. High priority should be given to the protection of these resources in accordance with Executive Order 13089 and DOD policy statements and DoD Implementation Plan on coral reef protection. The identification and conservation of coral reefs should be addressed in INRMPs, where appropriate, to ensure their protection.

**Forest Stewardship:** Stewardship includes natural resource management practices seeking to improve land conditions. The goals are to develop, maintain and or restore healthy forest ecosystems.

**Game Species:** Controlling the populations of wildlife species that are hunted, trapped or fished

**Gulf of Mexico Initiative:** A regional effort designed to promote economic, educational, and cultural exchanges between Mexico and the states lining the Gulf.

**Gulf of Coastal Plain Ecosystem Partnership:** The Gulf Coastal Plain Ecosystem Partnership (GCPEP) is a unique collaboration among Eglin AFB, The Nature Conservancy (TNC), Champion International Corporation, Blackwater River State Forest, Northwest Florida Water Management District and National Forests in Alabama and Florida, who cooperate under the auspices of a 1996 multi party Memorandum of Understanding. The partners manage more than 840,000 acres in one of the most important conservation landscapes in the Southeast.

**Invasive Species Control:** Managing species that have moved beyond their natural habitat and are competing with native species for food and territory. By prevention, early detection and rapid response major damage to ecosystems and the economies is controlled.

**Longleaf Alliance:** A non-profit established in 1995 with the express purpose of coordinating a partnership between private landowners, forest industries, state and federal agencies, conservation groups, researchers, and other enthusiasts interested in managing and restoring longleaf pine forests for their ecological and economic benefits.

**Migratory Bird Management:** Monitoring migration patterns, use of habitat, species distribution and quantity of waterfowl, land birds, seabirds, shorebirds, and raptors.

**Mojave Desert Initiative:** The federal government granted \$5 million to fund the Mojave Desert Initiative, which will compile scientific data about the desert into a central database. Scientists are studying the soil, vegetation and wildlife. The initiative is headquartered at Fort Irwin. "In this day and age, we tend to think everything is scientifically mapped and understood," said Ahmann, who is also an executive agency representative for the initiative. "The reality is we're pretty clueless about the Mojave Desert."

**Non-Game Species:** Programs that monitor, maintain, and promote public awareness while implementing plans that protect species that are not hunted, trapped or fished.

**Nuisance Species:** Controlling invasive species through targeted removal, predator management, and response to wildlife, conflict resolution, avoidance, limiting feral wildlife, revising landscaping practices and educating the public.

**Outdoor Recreation Opportunities:** Activities open to the public such as bird watching, hiking, fishing, and watchable wildlife programs.

**Partners in Flight:** Launched in 1990 in response to growing concerns about declines in the populations of many land bird species, and in order to emphasize the conservation of birds not covered by existing conservation initiatives. The focus has spread to include most land birds and other species requiring terrestrial habitats in North and South America. Partners in Flight' goal is to improve monitoring and inventory, research, management, and education programs involving birds and their habitats.

**Planning Level Surveys:** Identifying and documenting the location of listed, proposed, and candidate species on an installation is crucial to effectively balancing mission and conservation requirements. Failure to properly inventory listed and proposed species can lead to violation of the ESA and costly disruption of military operations and construction activities upon discovery of such species. Installations will conduct initial, thorough inventories of plants, fish, wildlife, and habitat types on installation lands, using scientifically accepted methodology. Installations will conduct a 100 percent inventory of suitable habitat for listed, proposed, and category 1 candidate species that may occur on the installation.

**Recreational Fisheries:** The goals are to formulate, adopt, and implement actions that will improve

the nation's aquatic resources; Provide accessibility and awareness of opportunities for public participation and enjoyment of the resources; Encourage and establish partnerships between governments and the private sector to enhance recreational fishing opportunities; and achieve balance in the management and use of recreational fishery resources.

### **San Diego Bay Initiative:**

Soil and Water Conservation Society (SWCS): A nonprofit scientific and educational organization founded in 1943 that serves as an advocate for conservation professionals and for science-based conservation practice, programs, and policy.

The mission is to foster the science and art of natural resource conservation. The SWCS work targets conservation of soil, water, and related natural resources on working land—the land used to produce food, fiber, and other services that improve the quality of life people experience in rural and urban communities while working to discover, develop, implement, and constantly improve ways to use land that sustains its productive capacity and enhances the environment at the same time.

**Student Conservation Association (SCA):** The SCA provides high school students, college students, and others with meaningful conservation service internships and volunteer opportunities in our National Parks, Forests, and other public lands. While providing service opportunities, outdoor skills and leadership training to thousands of young women and men each year.

**T&E Species Program:** Endangered Species Program conserves endangered and threatened species and the ecosystems upon which they depend. As of September 2001, there were 1,244 U.S. species listed as endangered or threatened, 237 candidate species and 38 species proposed for listing. Conserving endangered and threatened species is necessary to preserve our natural heritage for future generations and to maintain our quality of life. Conserving ecosystems benefits all users of ecosystem resources and is essential to maintaining our nation's long term economic prosperity.

Our Program's priorities are:

- 1) Preventing extinction.
- 2) Recovering species that are listed.
- 3) Making listing species unnecessary.
- 4) Providing quality customer service to Federal, State, and local governments and private individuals to assist them in conserving endangered species while meeting their social and economic objectives.

### **Urban Forestry:**

Watchable Wildlife Program: A national program designed to promote viewing areas for the American public to observe experience and enjoy native North American wildlife and habitat. Watchable Wildlife, Inc. seeks to put you in touch with the most up-to-date strategies for providing positive wildlife viewing experiences for visitors and residents. The organization's philosophy is straightforward. Watchable Wildlife, Inc. is committed to helping local communities realize the economic potential of nature-related recreation while conserving native plants and animals in their natural habitats.

Watchable Wildlife, Inc. helps you to provide these opportunities for your community by concentrating our efforts in three major areas:

- 1) The Annual Watchable Wildlife Conference
- 2) Publications
- 3) Special Project Assistance

**Wetlands:** Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, such as swamps, marshes, and bogs.

## Ecosystem Integrity – Habitat Type Definitions

**Agricultural Land** : Agricultural Land may be defined broadly as land used primarily for production of food and fiber. On high-altitude imagery, the chief indications of agricultural activity will be distinctive geometric field and road patterns on the landscape and the traces produced by livestock or mechanized equipment. Examples are: Cropland and Pasture; Orchards, Groves , Vineyards, Nurseries, and Ornamental Horticultural Areas; Confined Feeding Operations; and Other Agricultural Lands such as horse farms and corrals.

**Beaches & Dunes** : Beaches are the smooth sloping accumulations of sand and gravel along shorelines. The surface is stable inland, but the shoreward part is subject to erosion by wind and water and to deposition in protected areas. Sandy dune areas other than Beaches are composed primarily of dune accumulations of sand transported by the wind. Sand accumulations most commonly are found in deserts although they also occur on coastal plains, river flood plains, and deltas and in high altitude deserts and other barren areas.

**Shrub and Brush Land** : The typical shrub brush land occurrences are found in those arid and semiarid regions characterized by such xerophytic vegetative types with woody stems as big sagebrush (*Artemisia tridentata*), shadscale (*Atriplex confertifolia*), greasewood (*Sarcobatus vermiculatus*), or creosotebush (*Larrea divaricata*) and also by the typical desert succulent xerophytes, such as the various forms of Cactus (Kuchler, 1964). When bottom lands and moist flats are characterized by dense stands of typical wetland species such as mesquite (*Prosopis*), they are considered Wetland. Also included in this category are chaparral, a dense mixture of broadleaf evergreen shrubs, and the occurrences of mountain mahogany (*Cercocarpus ledifolius*) and scrub oaks. Many of these brush lands are grazed in an extensive manner by livestock and provide valuable wildlife habitat.

**Desert** : Areas consisting of perennially barren areas of bedrock, desert pavement, scarps, talus, slides, sand deposits, volcanic material, glacial debris, and other accumulations of earthen material. Vegetation is sparse but can be varied, and climate is typically dry with little annual rainfall.

**Forest Upland** : Forest Uplands have a tree-crown areal density (crown closure percentage) of 10 percent or more, are stocked with trees capable of producing timber or other wood products, and exert an influence on the climate or water regime. Forest Uplands may also include areas designated for wilderness reservation, water or habitat conservation, or ownership classification. This category includes: deciduous forest, evergreen forest, and mixed forest. Lands from which trees have been removed to less than 10 percent crown closure but which have not been developed for other uses also are included. For example, lands on which there are rotation cycles of clear-cutting and block-planting are part of Forest Land. On such lands, when trees reach marketable size, which for pulpwood in the Southeastern United States may occur in 2 to 3 decades, there will be large areas that have little or no visible forest growth. The pattern can sometimes be identified by the presence of cutting operations in the midst of a large expanse of forest.

**Grasslands** : Lands covered by natural and managed herbaceous cover. Grasslands or Rangelands historically has been defined as land where the potential natural vegetation is predominantly grasses, grass like plants, forbs, or shrubs and where natural herbivory was an important influence in its pre-civilization state. Some grasslands have been or may be seeded to introduced or domesticated plant species. This category encompasses lands dominated by naturally occurring grasses and forbs, or an intermixture of either herbaceous or shrub and brush rangeland plant species.

**Nearshore Areas & Coral Reef** : Nearshore marine habitats include coral reefs, seagrass beds, mangroves, coastal lagoons, beaches, and mud bottom communities. Nearshore is defined as areas between mean high water lines to boundaries of security zones established in waters adjacent to Navy/Marine Corps installations

**Ponds & Lakes:** Lakes are non-flowing, naturally enclosed bodies of water, including regulated natural lakes but excluding reservoirs. Islands that are too small to delineate should be included in the water area. The delineation of a lake should be based on the areal extent of water when such data is acquired. This category also includes reservoirs, and water bodies that have been impounded.

**Riparian Areas:** This refers to the area of land adjacent to a body of water, stream, river, marsh, or shoreline. Riparian areas form the transition between the aquatic and the terrestrial environment. (Source: EPA)

**Rivers & Streams:** The Rivers and Streams category includes rivers, creeks, canals, and other linear water bodies. The boundary between river, streams and other bodies of water is the straight line across the mouth of the stream up to 1 nautical mile (1.85 km).

**Wetlands:** Wetlands are those areas where the water table is at, near, or above the land surface for a significant part of most years. The hydrologic regime is such that aquatic or hydrophytic vegetation usually is established, although alluvial and tidal flats may be nonvegetated. Wetlands frequently are associated with topographic lows, even in mountainous regions. Examples of wetlands include marshes, mudflats, and swamps situated on the shallow margins of bays, lakes, ponds, streams, and manmade impoundments such as reservoirs. They include wet meadows or perched bogs in high mountain valleys and seasonally wet or flooded basins, playas, or potholes with no surface-water outflow. Shallow water areas where aquatic vegetation is submerged are classed as open water and are not included in the Wetland category.

**Urban Areas:** Urban or Built-up Land is comprised of areas of intensive use with much of the land covered by structures. Included in this category are: cities, towns, villages, strip developments along highways, transportation, power, and communications facilities, and areas such as those occupied by mills, factories, and warehouses, shopping areas, industrial, residential, and commercial complexes.

Source: Anderson, James R. (USGS, 1976)  
(Based on modified Level I categories)  
<http://landcover.usgs.gov/pdf/anderson.pdf>