

Southern California (SOCAL) Range Complex Management Plan (RCMP) Workplan



Contract No. N68711-01-D-6205
Range Sustainability Services

December 16, 2002



Department of the Navy

Commander, U.S. Fleet Forces Command
and
Commander, U.S. Pacific Fleet

**Southern California (SOCAL)
Range Complex Management Plan (RCMP)
WORKPLAN**

Developed for

COMMANDER, U.S. FLEET FORCES COMMAND

And

COMMANDER, U.S. PACIFIC FLEET

Pearl Harbor, HI

December 16, 2002

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Developed Under

**Southwest Division Naval Engineering and Facilities Command
Contract # N68711-01-D-6205**

By

Ecology & Environment, Inc.

SRS Technologies

ACRONYMS

| | |
|----------------|---|
| AAAV | Advanced Amphibious Assault Vehicle |
| AA&E | Arms, Ammunition and Explosives |
| ACOS | Assistant Chief of Staff |
| ACM | Air Combat Maneuvering |
| AICUZ | Air Installation Compatible Use Zone |
| ARG | Amphibious Ready Group |
| ARPA | Advance Research Projects Agency |
| ASDS | Advanced Swimmer Delivery Vehicle |
| ASW | Anti-Submarine Warfare |
| ATCAA | Air Traffic Control Assigned Airspace |
| BA | Biological Assessment |
| BO | Biological Opinion |
| BOMBEX | Bombing Exercise |
| BOS | Base Operations Support |
| BST | Battle Staff Training |
| C2X | Composite Training Unit Exercise |
| CA | California |
| CAA | Clean Air Act |
| CAACA | Clean air Act Conformity Analysis |
| CADD | Computer Aided Design and Drafting |
| CAS | Close Air support |
| CCD | Coastal Consistency Determination |
| CD-ROM | Compact Disk-Read Only Memory |
| CFFC | Commander, United States Fleet Forces Command |
| CIWS | Close-In Weapon System |
| CNAP | Commander, Naval Air Force Pacific Fleet |
| CNSP | Commander, Naval Surface Force Pacific Fleet |
| CNO | Chief of Naval Operations |
| COMCABWEST | Commander, Marine Corps Air Bases West |
| COMLANTFLT/CLF | Commander, U.S. Atlantic Fleet |
| COMNAVBEACHGRU | Commander, Naval Beach Group |
| COMPACFLT/CPF | Commander, U.S. Pacific Fleet |
| COMPTUEX/C2X | Composite Training Unit Exercises |
| COMTHRIDFLT | Commander, Third Fleet |
| COMSUBTRAGRU | Commander, Submarine Training Group |
| CONOPS | Concept of Operations |
| COTS | Commercial Off-the-Shelf |

| | |
|---------|---|
| CPAAA | Camp Pendleton Amphibious Assault Area |
| CPAVA | Camp Pendleton Amphibious Vehicle Training Area |
| CRA | Coral Reef Analysis |
| CRS/PA | Cultural Resource Survey/Programmatic Agreement |
| CSA | Countermeasures, Submarine Acoustic |
| CSP | Commander, Submarine Force Pacific Fleet |
| CWA | Clean Water Act |
| DoD | Department of Defense |
| DoE | Department of Energy |
| DoJ | Department of Justice |
| DSN | Defense Switched Network |
| EA | Environmental Assessment |
| E & E | Ecology & Environment, Inc. |
| EFH | Essential Fish Habitat |
| EFHA | Essential Fish Habitat Analysis |
| EIS | Environmental Impact Statement |
| EO | Executive Order |
| EOD | Explosive Ordnance Disposal |
| ENETA | Encinitas Naval Electronic Test Area |
| ERT | Enhanced Readiness Team |
| ESRI | Environmental Systems Research Institute |
| EW | Electronic Warfare |
| FACSFAC | Fleet Area Control and Surveillance Facility |
| FGDC | Federal Geographic Data Committee |
| FLETA | Fleet Training Area |
| FPT | San Clemente Island Fleet Project Team |
| FTX | Fleet Training Exercise |
| GIS | Geographical Information System |
| GSA | General Services Administration |
| GUNEX | Gun Exercise |
| HARMEX | HARM (Missile) Exercise |
| HCOTA | Helicopter Offshore Training Area |
| HI | Hawaii |
| IADS | Integrated Air Defense System |
| IDTC | Inter-Deployment Training Cycle |
| IHA | Incidental Harassment Authorization |
| IMEF | 1st Marine Expeditionary Force |
| INRMP | Integrated Natural Resources Management Plan |

| | |
|-------------------|---|
| IT | Information Technology |
| JTFEX | Joint Task Force Exercise |
| LATR | Large Area Tracking Range |
| LOA | Letter of Authorization |
| LTTR | Live Tactical Training Range Instrumentation Roadmap |
| MAGTF | Marine Air Ground Task Force |
| MARFORPAC | Marine Forces Pacific |
| MCAGCC | Marine Corps Air Ground Combat Center |
| MCALF | Marine Corps Auxiliary Landing Field |
| MCAS | Marine Corps Air Station |
| MCCDC | United States Marine Corps Combat Development Command |
| MCB | Marine Corps Base |
| MET | Marine Corps Mission Essential Task |
| MCM | Mine Counter Measures |
| MEU | Marine Expeditionary Unit |
| MILCON | Military Construction |
| MIR | Missile Impact Range |
| MISR | Missile Range |
| MMPA | Marine Mammal Protection Act |
| MOA | Military Operations Area |
| MOOTW | Military Operations other than War |
| MSDD | Marine Species Density Data |
| NAF | Naval Air Facility |
| NAOPA | Northern Air Operating Area |
| NALF | Naval Auxiliary Landing Field |
| NAS | Naval Air Station |
| NAVFAC | Naval Facilities Engineering Command |
| NAVSPECWARCEN | Naval Special Warfare Center |
| NAVSPECWARCOM | Naval Special Warfare Command |
| NAVSPECWARGRU ONE | Naval Special Warfare Group ONE |
| NB | Naval Base |
| NAWS | Naval Air Weapons Station |
| NEPA | National Environmental Policy Act |
| NRRF | Navy Radio Receiving Facility |
| NGO | Non-Governmental Organization |
| NMETL | Navy Mission Essential Task List |
| NRO | Natural Resources Office |
| NAVSTA | Naval Station |

| | |
|---------|--|
| NSW | Naval Special Warfare |
| NSWTTRC | Naval Special Warfare Tactical Training Range Complex |
| NTR | Navy Technical Representative |
| NTROO | Navy Training Range and Operating Area (OPAREA)/Organization |
| NWAS | Naval Warfare Assessment Station |
| OBFS | Offshore Bulk Fuel System |
| OEIS | Overseas Environmental Impact Statement |
| OLF | Outlying Landing Field |
| OMB | Office of Management and Budget |
| OPAREA | Operating Area |
| OPNAV | Office of the Chief of Naval Operations |
| ORC | Operational Range Clearance |
| ORE | Operational Readiness Evaluation |
| OMP | Operations Management Plan |
| OSD | Office of the Secretary of Defense |
| OTP | Operations Training Plan |
| PDF | Portable Document Format |
| POA&M | Plan of Action and Milestones |
| POC | Point-of-Contact |
| POM | Program Objective Memorandum |
| PTP | Pre-Deployment Training Program |
| PWC | Public Works Center |
| R&TA | Range and Training Area Management Division |
| R2R | Ranges to Readiness |
| RAICUZ | Range Air Installation Compatible Use Zone |
| RCMP | Range Complex Management Plan |
| RCSR | Range Complex Sustainability Review |
| RDT&E | Research, Development, Test and Evaluation |
| REWS | Range Electronic Warfare Simulator |
| ROS | Range Operations Support |
| RRB | Regional Review Board |
| RSEPA | Range Sustainability Environmental Program Assessment |
| RSIP | Regional Shore Infrastructure Planning |
| SACEX | Supporting Arms Coordination Exercise |
| SBT | Special Boat Team |
| SCIRC | SCI Range Complex |
| SCIUR | San Clemente Island Underwater Range |
| SDBTA | San Diego Bay Training Area |

| | |
|--------|--|
| SDSFIE | Spatial Data Standards for Facilities, Infrastructure, and Environment |
| SDV | SEAL Delivery Vehicle |
| SEAL | SeaAirLand |
| SESEF | Shipboard Electronic Systems Evaluation Facility |
| SIT | Squadron Interoperability Training |
| SOAR | SOCAL ASW Range |
| SOCEX | Special Operations Capable Exercise (USMC) |
| SHOBA | Shore Bombardment Area |
| SOC | Special Operations Capable (USMC) |
| SOCAL | Southern California |
| SOCOM | U.S. Special Operations Command |
| SOW | Statement of Work |
| SPAWAR | Space and Naval Warfare Systems |
| SPCOA | San Pedro Channel Operating Area |
| SSABA | Silver Strand Amphibious Beaching Area |
| SUA | Special Use Airspace |
| SWAT | Special Warfare Training Area |
| SWCC | Special Warfare Craft Crewmember |
| SWDIV | Southwest Division, Naval Facilities Engineering Command |
| TACTS | Tactical Aircrew Combat Training System |
| TAP | Tactical Training Theater Assessment and Planning |
| TARs | Training Areas and Ranges |
| TBD | To Be Determined |
| TECOM | Training and Education Command |
| TMA | Tactical Maneuvering Areas |
| TORPEX | Torpedo Exercise |
| TRIMS | Target and Range Information Management System |
| TRS | Training Resource Strategy |
| TSPI | Time, Space, Position Information |
| ULT | Unit Level Training |
| USMC | United States Marine Corps |
| USN | United States Navy |
| UWD | Underwater Demolition |
| UXO | Unexploded Ordnance |
| WISS | Weapons Impact Scoring System |
| WSCOA | Western San Clemente Operating Area |

EXECUTIVE SUMMARY

This Workplan for the Southern California (SOCAL) Range Complex Management Plan (RCMP) is a guide to the development and coordination of the RCMP. The Workplan follows the template of the Cherry Point/Camp Lejeune prototype and identifies and describes the six sections of the RCMP and the major activities embodied in the RCMP effort. As with all planning efforts, the Navy/Contractor team may need to adjust Workplan parameters as the RCMP effort develops.

Purpose—The purpose of the Workplan is to capture and describe the necessary actions to complete the SOCAL RCMP. The Workplan includes a proposed plan of actions and interim contractor timelines to accomplish each defined task, definitions of responsibilities for each work effort, and plans for data collection and record-keeping to support an Administrative Record.

Objective—The SOCAL RCMP is a second prototype to be used as a template for 21 Navy and 10 Marine Corps Range complexes (including SOCAL) under the Tactical Training Theater Assessment and Planning (TAP) program. The Navy's objectives for TAP are to maintain access to ranges, operating areas, and airspace necessary for Fleet readiness training and ensure their long-term viability while protecting human health and the environment.

Organization— The overall RCMP Team consists of the supported commands, supporting contract authorities, the contractor team, and numerous stakeholders. The supported command is Commander, U.S. Pacific Fleet (COMPACFLT). The facilities directly involved can be considered subordinate supported commands: NB Coronado, FACSFAC San Diego, FACSFAC Det SCORE (referred hereinafter as SCORE), and the Naval Special Warfare Command Tactical Training Range Complex. Within COMPACFLT, the sponsoring offices are COMPACFLT N46/N3/N5/N7. Supporting contract authority is the Naval Facilities Engineering Command (NAVFAC) Southwest Division (SWDIV). The contractor team consists of Ecology & Environment, Inc., and SRS Technologies. Stakeholders include all of the above plus Commander, U.S. Fleet Forces Command (CFFC), COMTHRIDFLT, Navy Training Range and Operating Area (OPAREA)/Organization (NTROO); Office of the Chief of Naval Operations (OPNAV) Codes N43, N44, N45, N46; Commander, Navy Region Southwest; Surface/Air/Submarine Lead Type Commanders (TYCOM); Afloat Training Group, Pacific (ATGPAC), Naval Special Warfare Command (NAVSPECWARCOM); Space and Naval Warfare (SPAWAR) Command; and Naval Facilities Engineering Command (NAVFACENGCOM) Divisions. Adjacent range complexes that may be affected by SOCAL operations include: Point Mugu Sea Range, China Lake Land Range, Camp Pendleton Range Complex, Yuma Training Range Complex, and Fallon Naval Training Center.

Technical Approach—The RCMP team will develop the RCMP within three broad areas: Range Complex Operations, Range Complex Sustainable Management, and Range Complex Investment Strategy. The Operations team will collect data and characterize current and future Navy operational activities and practices within the SOCAL Range complex, which includes the Operating Areas and Warning Areas. The Sustainability team will review range management, assess encroachment impacts and range vulnerabilities, and use Ranges-to-Readiness (R2R) criteria to evaluate the ranges' contributions to Fleet training readiness. The Investment team will analyze range requirements and provide investment strategies for range sustainment and modernization. Appendix A is an initial outline of the RCMP.

Plan of Action and Milestones (POA&M)—The RCMP plan of action is to have three specialized teams—Range Operations, Range Sustainability, Range Investment—working in coordination with each other for distinct parts of the RCMP project. Appendix B, Plan of Action and Milestones

(POA&M), contains the RCMP project schedule that includes milestones for major RCMP activities and deliverables, and the dates for proposed site, data collection, and data analysis visits.

Data Collection and Record Keeping—The RCMP teams will collect data and maintain records throughout the project using a series of record keeping tools that include an administrative record, contact reports, an Access database archive, and a Geographical Information System (GIS) database.

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Southern California (SOCAL) Range Complex Management Plan (RCMP) WORKPLAN

1. PURPOSE OF THE RCMP WORKPLAN

The purpose of the Workplan is to capture and describe the actions necessary to complete the Range Complex Management Plan (RCMP). The structure of the Workplan is outlined in the Executive Summary. The Workplan consists of the following elements:

- Proposed plans of action and interim contractor timelines to accomplish each defined task;
- Definitions of responsibilities for each work effort; and
- Plans for data collection and record-keeping to support an Administrative Record.

The RCMP's ultimate purpose is to provide range management and sustainment planning tools for the Navy's SOCAL Range Complex. The RCMP will catalogue total range usage with an emphasis on training that supports the Navy Inter-Deployment Training Cycle (IDTC).

2. UNDERSTANDING THE TACTICAL TRAINING THEATER ASSESSMENT AND PLANNING (TAP) PROGRAM

2.1. Navy TAP Program

Encroachment threatens the long-term sustainable use of Naval Ranges, Operating Areas, and airspace. External factors that contribute to encroachment include urbanization, increasing environmental restrictions, and competition with civilian airspace, land, seaspace, and radio frequencies. In view of these sustainability issues, the Tactical Training Theater Assessment and Planning (TAP) program was established to support Naval objectives that: (1) promote use and management of Department of the Navy ranges, OPAREAs and airspace in a manner that supports national security objectives and maintains the high state of readiness of Naval forces, and (2) ensure the long-term viability of these assets while protecting human health and the environment. The focus of TAP is on sustainability of ranges and OPAREAS that support the Navy's Inter-Deployment Training Cycle (IDTC).

There are five main subcomponents under the TAP Program, which are:

- RCMP
- Environmental planning documents
- Marine species density data
- Operational range clearance
- Range sustainability environmental program assessment (RSEPA)

These subcomponents will provide the process to assess and document each range complex to better manage and prevent vulnerabilities from affecting our ability to train. The RCMP is the first of the TAP

products and will be used as the basis to determine and address environmental requirements and to justify requests for range investment funding.

2.2. USMC Involvement

Marine Corps will be involved to the extent their forces use the SOCAL Complex. For example I MEF units routinely conduct amphibious training on SCI and occasionally on Coronado beaches. Marine air units from Miramar frequently fly in the Papa Special Use Airspace of W-291, and I MEF has proposals to conduct Infantry Battalion landings and AAV operations on SCI. There are also joint Navy/Marine Corps operations to the shoreline of Camp Pendleton.

3. RCMP TEAM ORGANIZATION

3.1. RCMP Team

The overall RCMP Team consists of the supported commands, supporting contract authorities, the contractor team, numerous stakeholders, and adjacent range complexes. The supported command is Commander, U.S. Pacific Fleet (COMPACFLT) N46/N3/N5/N7. The facilities directly involved can be considered as subordinate supported commands: Naval Base Coronado (NB Coronado), FACSFAC San Diego, FACSFAC Det SCORE (referred hereinafter as SCORE), and Naval Special Warfare Command. Within COMPACFLT, the sponsoring offices are COMPACFLT N46/N3/N5/N7. Supporting contract authority is the Naval Facilities Engineering Command (NAVFACENGCOM), Southwest Division (SWDIV). The contractor team consists of Ecology & Environment, Inc., and SRS Technologies.

Stakeholders include all of the above plus Commander, U.S. Fleet Forces Command (CFFC), COMTHRIDFLT, Navy Training Range and Operating Area (OPAREA)/Organization (NTROO); Office of the Chief of Naval Operations (OPNAV) Codes N43, N44, N45, N46; Commander, Navy Region Southwest; Surface/Air/Submarine Lead Type Commanders (TYCOM); Afloat Training Group, Pacific (ATGPAC), Naval Special Warfare Command (NAVSPECWARCOM); Space and Naval Warfare (SPAWAR) Command; and Naval Facilities Engineering Command (NAVFACENGCOM) Divisions.

Adjacent range complexes that may be affected by SOCAL operations include: Point Mugu Sea Range, China Lake Land Range; Camp Pendleton Range Complex, Yuma Training Range Complex, Fallon Naval Training Center, and NAF El Centro.

3.1.1. Supported Command Representatives

The COMPACFLT Navy Technical Representatives (NTR) is Larry Foster (808) 471-4235 (fosterlm@cpf.navy.mil). The CNRSW NTRs are Larry Jones (775) 426-2405 (larry.jones@navy.mil) and JW Wickett (619) 524-6388 (Wickett.J.W@asw.cnrsw.navy.mil). FACSFAC San Diego, SCORE, NAVSPECWAR, and NB Coronado are also being supported, as they are the commands responsible for the various components comprising the overall SOCAL Range Complex. The FACSFAC San Diego POC is CDR Louie Partida, (619) 545-1741 (Partida@facsfac.navy.mil), P.O. Box 305762, San Diego, California. SCORE contact is Robert Tahimic, (619) 545-8527 (rtahimic@score.com), P.O. Box 305762, San Diego, California. The NAVSPECWARCOM NTR is CDR Bill Hogan (619) 437-0922 (hoganw@navsoc.navy.mil)

3.1.2. Supporting Contract Authority

The task order directing preparation of this prototype RCMP is with SWDIV. The POC is Bob Henderson, Southwest Division Naval Facilities Engineering Commander, Code 05BP.RH, 1220 Pacific Highway, San Diego, CA 92132, 619-532-1622, DSN 522-1622, Hendersonrk@efdswnavfac.navy.mil.

3.1.3. RCMP Contractor Team Organizational Diagram

The plan of action for the development of the RCMP is to have three specialized teams working in coordination, with each team assigned the lead for distinct parts of the RCMP project. The three teams are: 1) the Range Operations team; 2) the Range Sustainability team; and 3) the Range Investment team. Figure 1 illustrates the organization of the contractor team, and the division of roles and responsibilities.

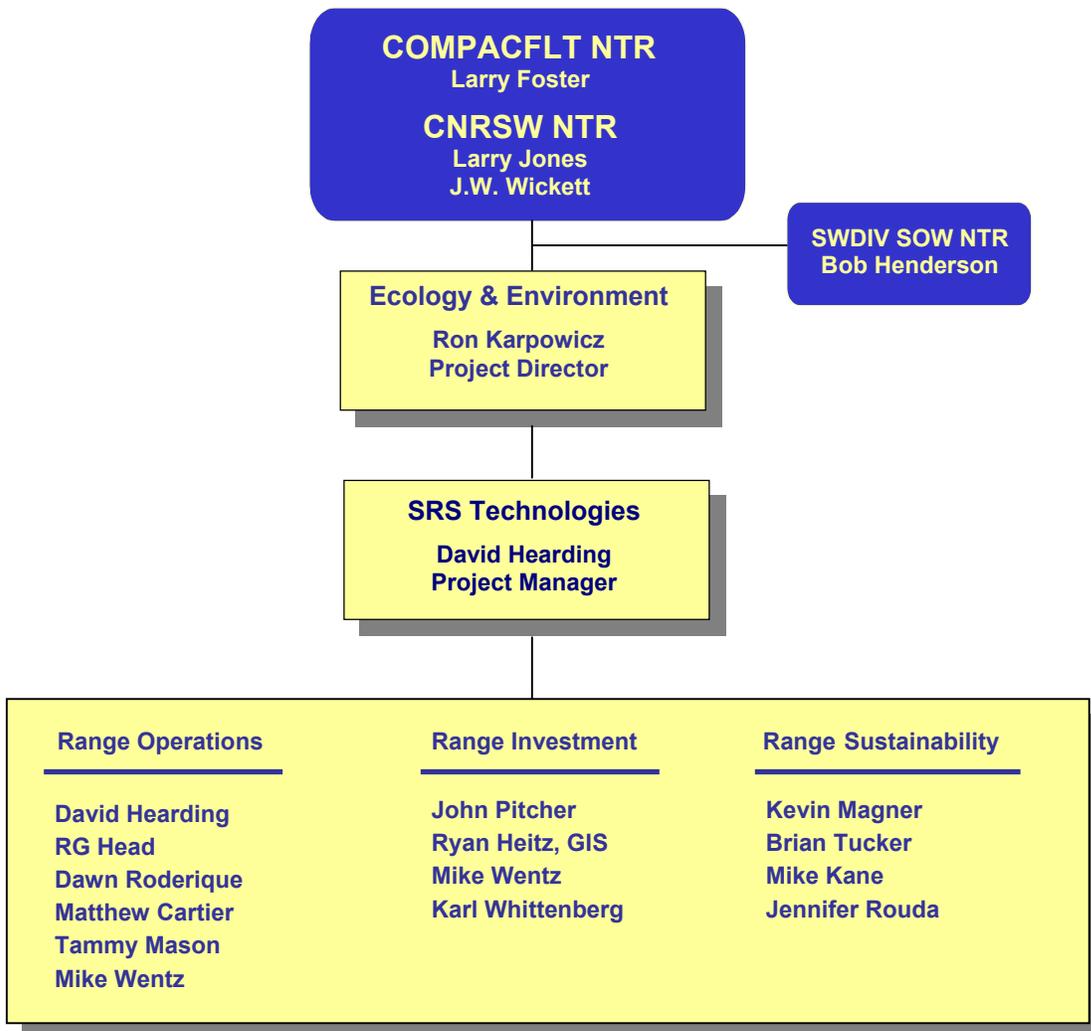


Figure 1. RCMP Contractor Team Organization

4. TECHNICAL APPROACH

4.1. Range Sustainability

Range sustainability is the process of protecting the operational capability of training ranges from erosion due to encroachment, non-compliance with environmental regulation, obsolescence of range infrastructure, etc. This process involves preserving and conserving range resources for future use. The RCMP will guide range sustainability by analyzing range use and requirements, by mapping planning strategies and by developing sustainment programs in three main areas:

1. Compile defensible data to support the proposed action and alternatives for a range complex EIS, environmental permit applications, future litigation, etc.
2. Recommend investment products and management programs to aid the range managers in maintaining and upgrading range operational capabilities and mitigating encroachment.
3. Tailor operational and environmental data presentation to assist mission and environmental planners in exercise planning.

Figure 2 is a graphical representation of the RCMP analysis process.

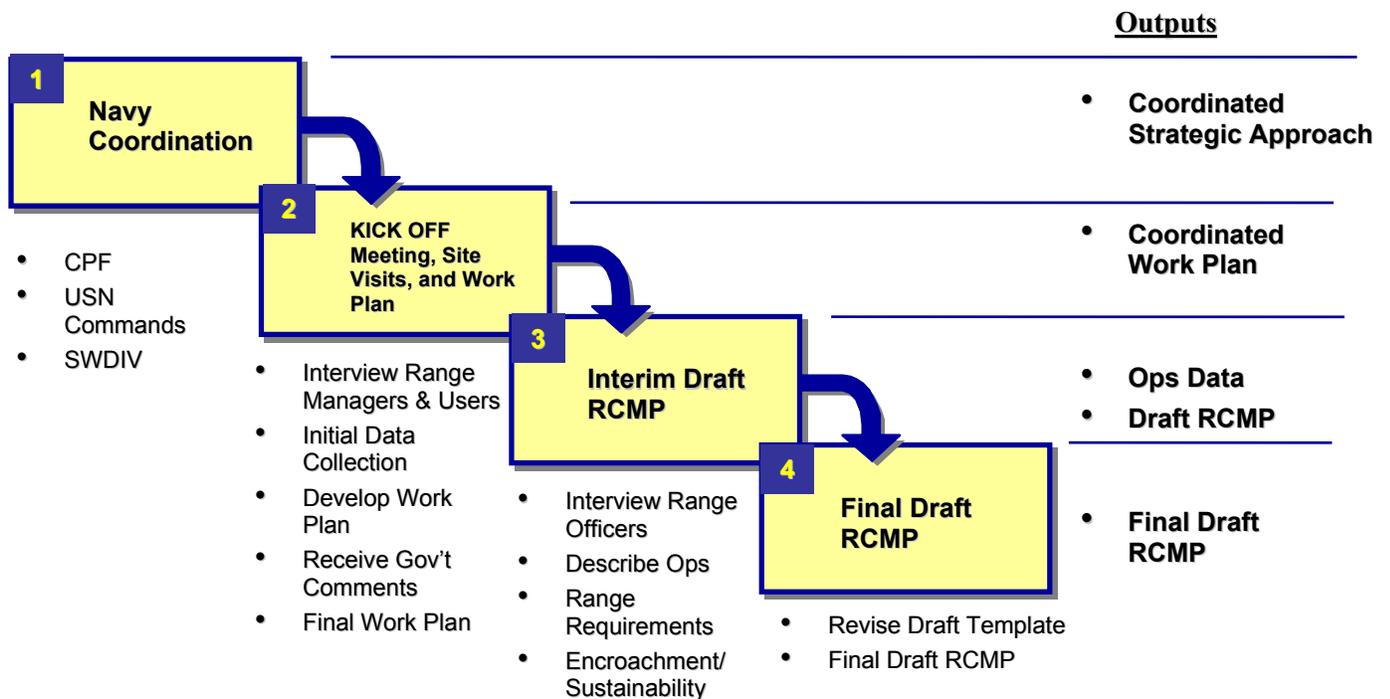


Figure 2. RCMP Analysis Process

4.2. RCMP Organization

The RCMP is organized into three main sections, as described below. Please refer to Appendix A for a detailed outline of the RCMP.

1. **Range Complex Operations**—characterizes and quantifies representative military training operations at the SOCAL Range complex and projects range requirements out to year 2012.
2. **Range Complex Sustainable Management**—identifies and analyzes encroachment challenges affecting the complexes to aid in the impact analysis of the EIS/OEIS, and develops a public outreach program.
3. **Range Complex Investment Strategy**—recommends investment products to ensure sustainability of current and projected operations.

4.2.1. Range Complex Operations

4.2.1.1. Range Complex Mission

The Operations team will collect and analyze the contribution of the Range Complex to the Inter-Deployment Training Cycle (IDTC) and Pre-Deployment Training Program (PTP). The Operations team will analyze the command relationships and coordination procedures during normal operations, exercises, and joint training operations. Operations data collection will determine the extent of range usage by tenant organizations, primary hosts, and other commands. The Operations team will also analyze each complex's usage for research, development, test, and evaluation (RDT&E) support.

4.2.1.2. SOCAL Range Complex

This section of the RCMP will describe both the operational and ecological setting for the SOCAL Range complex. The operational setting will include factors such as the area of battlespace, proximity to user home bases, training media provided, and weather. The ecological setting will draw upon existing environmental documentation to provide a description of the environmental setting within which training is conducted on the range complex.

Regional Setting

The SOCAL Range Complex geographically encompasses onshore, near shore, and offshore areas in and adjacent to Southern California. The range complexes contain the Naval ranges that are scheduled from separate locations: FACSAC San Diego, SCORE, NUWC Naval Base Coronado (NAB Coronado and NAS North Island), COMNAVBEACHGRU ONE, NSW Center, NSWG-1 and MCB Camp Pendleton (for adjacent amphibious training).

Individual Range/OPAREA/SUA Geographic Descriptions

As part of the RCMP, geographic and operational descriptions will be developed for the Naval ranges (and Marine Corps ranges, where applicable), special use airspace (SUA), and operating areas that are part of the SOCAL Range Complex. The geographic descriptions will include the development of detailed Geographic Information System (GIS) charts and maps, including Metadata, of the range areas and spatial statistics on the area occupied by the individual range areas. The operational descriptions of the range areas will provide basic information on the operations conducted in the range area, frequency of operations, types of ordnance used, typical using commands, and utilization, when available. The range areas that will be analyzed as part of the RCMP are listed below under the organization responsible for scheduling the range area.

FACSAC San Diego scheduling:

- Encinitas Naval Electronic Test Area (ENETA)
- Northern Air Operating Area (NAOPA)

- San Pedro Channel Operating Area (SPCOA)
- Tactical Maneuvering Areas (TMA) P-1 through P-8
- Western San Clemente Operating Area (WSCOA)
- Missile Range One (MISR-1) and Missile Range Two (MISR-2)
- Warning Area 291
- Fleet Training Area (FLETA HOT)
- Advance Research Projects Agency (ARPA) Training Minefield

SCORE Scheduling:

- SCI Range Complex (SCIRC)
- San Clemente Island Underwater Range/Operating Area (SCIUR/OPAREA) 3803
- Shore Bombardment Area (SHOBA)
- SOCAL ASW Range (SOAR)
- Range Electronic Warfare Simulator (REWS)
- Large Area Tracking Range (LATR)
- Kingfisher Mine Counter Measures (MCM) Range
- Breaklock REWS Threat Avoidance Training Area
- Laser Training Ranges (LTR) 1 and 2
- Missile Impact Range (MIR)
- Shallow Water Training Range (SWTR) (when established)
- Training Areas and Ranges (TARs)

- Other training areas on San Clemente Island
- Special Warfare Training Area One (SWAT-1)
- Special Warfare Training Area Two (SWAT-2)
- Special Warfare Training Area Three (SWAT-3)
- Special Warfare Training Area Four (SWAT-4)
- Special Warfare Training Area Five (SWAT-5)
- Special Warfare Training Area Six (SWAT-6)

NUWC Scheduling:

- ULM 4 Shipboard Electronic Systems Evaluation Facility (SESEF)

Naval Base Coronado (NAB Coronado and NAS North Island) Outlying Field (OLF) Scheduling:

- Helicopter Offshore Training Area (HCOTA)
- Survival, Evasion, Resistance, and Escape (SERE) Camp
- Reem Field
- OLF Imperial Beach

COMNAVBEACHGRU ONE Scheduling:

- San Diego Bay Training Area (SDBTA)
- Silver Strand Amphibious Beaching Area (SSABA)

COMNAVSPECWARCTR Scheduling:

- Naval Radio Receiving Facility (NRRF)

COMNAVSPECWARGRU ONE Scheduling:

- La Posta Mountain Warfare Training Facility

The Range Operations Team will develop this section of the RCMP by collecting and synthesizing data from multiple sources, including:

- Interviews with range users, schedulers, managers, and controllers.
- Range reports and databases
- Range scheduling and use records
- Range documents and directives
- Range and Base GIS/Computer Aided Design and Drafting (CADD) databases
- Site visits

The Range Operations Team, which is comprised of operational, environmental, and GIS analysts, will develop the range complex descriptions. The data sources used in the development of this section will be recorded in the administrative record, an operations scenario book, and the GIS database for future use.

4.2.1.3. Naval Special Warfare Command's Tactical Training Range Complex

Naval Special Warfare Command has two tactical training range complexes (TTRC), one for each Group. The NSWG-1 TTRC includes local ranges and training areas on Coronado, two Backyard ranges at La Posta and MCB Camp Pendleton, and the Regional ranges at Niland, CA. NSWG-2's TTRC are on the East Coast and consist of local, Backyard and Regional ranges in the vicinity of Little Creek, VA (these ranges will not be addressed in this SOCIAL RCMP).

4.2.1.4. Range Complex Operations

The IDTC establishes the training requirements for Navy forces prior to overseas deployment. The IDTC provides for and develops training incrementally through basic, intermediate, and advanced phases. Each phase allows for unit training emphasis to increase while focusing on individual warfare missions and enhanced threat and combat environments.

The Operations team will analyze the separate aspects of the training continuum, the supported warfare areas, and the requirement of the complex to support the training. Data collection and analysis will also consider the scheduling authorities and day-to-day scheduling activities: FACSFAC San Diego (and SCORE) for airspace and ocean operations; NUWC for the SESEF; and COMNAVBEACHGRU ONE (with Naval Base Coronado) for amphibious, ground, and air operations at San Diego Bay, along the Silver Strand, NAVSPECWARGRU ONE for La Posta and NAVSPECWARCEN for NRRF. Analysis will focus on those factors that limit training capabilities while hindering the accomplishment of mission requirements including encroachment, regulatory restrictions, operational tempo, capacity, sustainment, investment, and modernization.

FACSFAC San Diego

The Operations team will analyze FACSFAC San Diego capabilities, functions, and roles. The team will concentrate on the multi-layered management and control procedures associated with the air, surface, and subsurface activity within FACSFAC San Diego's control area. The team will concentrate on and define a representative set of operations types.

Data collection will focus on representative types of operations that routinely occur within the ocean operating area and air warning areas. Typical data for each operation will include number of ships and

aircraft, type of sensor systems, quantity and type of ordnance, targets used, and a description of the activity. Data will be maintained in a separate operations database. Analysis will address the varying degrees of hazardous, exclusive, and concurrent operations in the operations area. The analysis will also review the coordinated control effort between agencies and complexes in the scheduling, utilization, management, and transfer of jurisdiction during multifaceted operations such as Composite Training Unit Exercises (COMPTUEX) and Joint Task Force Exercises (JTFEX).

SCORE

The SCORE analysis will incorporate by reference data already collected to support the San Clemente Island Operations Management Plan and the San Clemente Island EIS and provide a list of operations performed in FY2002. The separate types of training or testing operations, events, and exercises involving sea, ground ranges, and airspace within the complex's area of operations will be identified. The Operations team will use the SCORE operational data and the Target and Range Information Management System (TRIMS) and concentrate data collection on the number of operations, participants, ordnance expended, and units supported. Interviews and contact reporting will occur on all aspects of range utilization from the users and controllers to support personnel. Data will be maintained in an operations database.

NAVAL BASE CORONADO (NAB CORONADO AND NAS NORTH ISLAND)

The Naval Base Coronado analysis will focus on the separate types of training operations, events, and exercises that involve San Diego Bay and the beach landing areas area along Silver Strand. The operations teams will use numbers and types of operations, participants, and units supported as data points in developing the baseline for range training events. Interviews and contact reporting will occur on all aspects of range utilization by users, controllers, and other support personnel. As appropriate, information from the Naval Base Coronado Operations Training Plan (OTP) and the San Clemente Island Operations Management Plan (OMP) will be incorporated by reference so as not duplicate analysis provided for those areas. Data will be maintained in an operations database.

Analysis will focus on the operations that sustain specific warfare areas and operational training requirements supporting IDTC at Naval Base Coronado (NAB Coronado and NAS North Island): Air, Surface, Amphibious, and Special Warfare, Support, and Information operations. The Operations team will also analyze the complex's capability to sustain these operations. In addition, the Operations team will focus on developing mission areas, technology advancements, and their encroachment impacts on range areas and operations. The team will also review operational tempo, mobilization, tenant organizational activities, encroachment, and coordination efforts for incremental impacts on readiness and training within the complex.

NAVAL SPECIAL WARFARE COMMAND TACTICAL TRAINING RANGE COMPLEXE

The SOCAL RCMP will describe the West Coast NSW Tactical Training Range Complex as it pertains to SOCAL operations. Training in the local NB Coronado (Silver Strand) beaches, San Diego Bay, and NRRF will be addressed, referencing their discussion in the NAB Coronado EIS. Operations at La Posta will be based on the NSW Environmental Assessment, updated to FY2002 operations. Operations at MCB Camp Pendleton will be reviewed in general, but not analyzed in detail. Detailed analysis, should that become desirable or necessary, should be addressed as part of a Camp Pendleton Range Complex NEPA document. Similarly, NSW operations at Niland should be considered part of the Yuma Training Range Complex, but a general overview of their types and intensity can be included in the SOCAL RCMP.

NAVAL AIR WARFARE CENTER WEAPONS DIVISION POINT MUGU

The Point Mugu Sea Range is a Range Complex lying just to the north and west of SOCAL. We have evaluated integrating the Pt. Mugu Complex. Since Pt. Mugu has an existing Management Plan and EIS and because Pt. Mugu is used extensively for BG training operations, it has been decided to integrate Pt. Mugu into the RCMP through reference to their existing EIS were practical.

4.2.1.5. Range to Readiness Review

The COMPACFLT Ranges to Readiness Study (R2R) conducted in late 2001, analyzed range warfare area training requirements, individual range complex contributions to readiness, and range encroachment vulnerabilities. Study findings reveal that the Navy lacks data to support range requirements, needs comprehensive range characterization and vulnerability assessments, lacks detailed Range Complex Management Plans, and requires investment strategies to modernize range instrumentation. The R2R study also identified SOCAL as COMPACFLT's most important range complex.

The RCMP project will apply the lessons learned from the R2R study to the unique circumstances of the SOCAL Range Complex. In particular, the RCMP effort will address encroachment pressures on the range complex as outlined by the R2R study. R2R identified that encroachment affects readiness by:

- Creating large avoidance areas to protect endangered species
- Reducing number of training days
- Segmenting training and reducing realism
- Prohibiting certain field training events
- Inhibiting development of new tactics to meet new and emerging threats
- Reducing flexibility and increases planning for range access
- Raising altitudes for flight training
- Limiting application of new weapons technologies
- Complicating night and all-weather training
- Reducing live-fire proficiency
- Increasing personnel tempo (time away from home station)
- Greatly increasing O&M costs

The R2R review as it applies to the SOCAL Range complex will identify training requirements and describe the range capabilities to support the training requirements. In that regard, the analysis will include the required range capabilities to accomplish primary training elements across the spectrum of qualification, basic, intermediate, and advanced training levels. In addition, the analysis will include the many factors influencing range capability, such as instrumentation, range expansion potential, ordnance restrictions, target quality and quantity, supported warfare mission areas, range utilization, weather, and others. In general, the R2R effort will characterize ocean operating areas, air warning areas, and the SOCAL Range complex and their contributions to Navy IDTC training.

4.2.1.6. Strategic Vision

The SOCAL RCMP Team will work with the Navy to develop a strategic planning vision for the Complex, (e.g., Adversary Island is an example). This will be facilitated by an expansion of the San Clemente Island Fleet Project Team (FPT) or the designation of a related SOCAL FPT. The FPTs meet quarterly as part of the COMTHIRDFLT quarterly scheduling conference. The members of the FPT will be the supported and supporting commands and stakeholders discussed above. This section will describe the vision for the range complex out to 10 years in the future, which we expect to be characterized by the

evolution of current range operations, the introduction of newer and more capable weapons and the development of evolutionary tactics for existing weapons. These anticipated weapons and tactics advancements will require interviews with USN representatives with access to or knowledge of applicable developmental information. Through interviews with Headquarters Navy resource officers, already-established Fleet Introduction Teams, the Operations team will determine how the complex will be used in the future to support operational training, the implications of future use on range requirements, improvements required to support future use, and environmental planning.

4.2.2. Range Complex Sustainable Management

The sustainable range complex management effort involves the review and analysis of current efforts in sustainability planning and practices by the Navy in Southern California. The RCMP will define the roles of the CNRSW's Enhanced Readiness Team (ERT) to manage and mitigate risks to readiness of training operations within the SOCAL Range complex on an on-going basis. In addition, the RCMP team will inventory existing environmental studies and current sustainability programs. The inventory will indicate the need for additional studies and programs that will improve range managers environmental coverage for current and projected range operations. The major sustainability principles that will guide this analysis are:

- Conduct operational mission training that is realistic, responsive, scalable, properly resourced, and compatible with environmental-regulations.
- Establish planning processes to identify range requirements and investment strategies for range modernization.
- Establish community involvement programs with the public, local, State, and Federal officials; Native American groups; and non-Governmental organizations (NGO) that foster partnerships, benefit-sharing, two-way communications, and political support.
- Develop Range Complex Management Plans that protect range capabilities to meet training and testing requirements while providing environmental stewardship.
- Update Headquarters, Regional, and Local processes in order to facilitate environmental resource management, Integrated Natural Resources Management Plan (INRMP) implementation strategies, and cultural resources management.

In formulating recommended revisions to current encroachment and sustainability management efforts, the Sustainability team will assess the encroachment impacts that are most harmful to training and testing. Assessments will connect training and testing requirements, methodologies, and techniques to range vulnerabilities. In addition, the assessments will provide alternative solutions to vulnerability mitigation. These assessments will enable command elements to make informed decisions regarding range management and investment strategies.

4.2.2.1. Encroachment and Sustainment Challenge

The encroachment and sustainment challenge is one of achieving balance between military training and testing range capacity and environmental stewardship. Guidance for range management is found in the current DoD Directive 4715.11, "Environmental and Explosive Safety Management on Department of Defense Active and Inactive Ranges Within the United States," August 17, 1999, and the draft DoD Directive, "Sustainment of Ranges and Operating Areas (OPAREAs)." Range capacity is a product of natural, cultural, and operational range resources management. When environmental stewardship

requirements restrict range access and availability, range capacity and capability are impacted. The Sustainability team will analyze the external pressures on the SOCAL Range complex to assess encroachment impacts on training and testing. Further, the team will provide mitigation strategies to reconcile the demands of training and testing requirements with the negative encroachment impacts. These mitigation strategies will seek to improve the encroachment impacts on range capacity and readiness training and testing.

Managing encroachment and sustainment involves a thorough understanding of the effects of encroachment on the SOCAL Range complex. Encroachment may take the form of civilian competition for airspace, erosion of the Naval use of the frequency spectrum, airborne noise restrictions and limitations, substantial urbanization adjacent to the range complexes, public safety, public range access, and environmental compliance. The Sustainability team will review applicable environmental regulations and will assess their impacts on range sustainability. The team will conduct numerous interviews with personnel directly involved in range operations to determine encroachment effects on training and testing. The RCMP will identify range encroachment, describe encroachment impacts, and suggest efforts to reduce encroachment pressures. We will review the encroachment matrix when it is shared with the team by COMPACFLT.

4.2.2.2. Public Outreach

The RCMP team will review public outreach efforts to determine the extent to which public outreach is coordinated with range operations and management. Operations conducted on the range complex are the subject of public sensitivities that must be addressed and reconciled to accommodate military training and testing. How the military approaches community relations often determines the outcomes of range issues affecting the public. The RCMP team will interview range public affairs officials and environmental practitioners to identify and characterize the public sentiment, range encroachment, operational safety, and environmental regulatory pressures. In turn, the RCMP will provide public outreach observations and practices that can supplement current activities.

4.2.2.3. Range Complex Sustainability Review

The Navy will re-examine the operational, environmental, and strategic assumptions that form the foundation of the SOCAL RCMP every five years and update the plan accordingly. Appendix A to the RCMP will provide a Range Complex Sustainability Review process. An interdisciplinary team of experts in operations, conservation, environmental management, explosives safety, real estate planning, legal, public affairs, and others as required, will conduct sustainability reviews.

4.2.3. Range Complex Investment Strategy

The SOCAL Range complex will support the Navy IDTC, and a variety of other training activities. The RCMP's ultimate purpose is to provide range management and sustainment planning to ensure the Naval forces can accomplish their training objectives at the SOCAL Range Complex well into the future. To protect these training capabilities, the Services will need to invest in environmental studies, instrumentation, targets, and maintenance, etc. The RCMP will recommend various investment products coupled to validated training requirements that support Navy Mission Essential Task Lists (NMETLs). In the interim, the Navy Tactical Task List (NTTL) will be used to derive requirements. The investment strategy should ensure that the priorities of the Fleet operations are taken into account in the funding for facilities, buoys, etc. One of the reference documents is being used in the West Coast Aviation and Range Plan.

4.2.3.1. Range Requirements Summary

The Range Complex Investment Team will identify the relevant training tasks that are supported by the training available at the SOCAL Range complex.

Once the current training tasks have been identified, the Investment team will identify future needs (i.e., the projected training tasks that the Pacific Fleet determines must be supported at the SOCAL Range complex out to 2012). This analysis will be used to develop the framework to identify future needs and the investment required to meet those needs. The framework will identify what additional physical and managerial range resources are required to meet these future training tasks.

The physical resources necessary for certain types of training include land and buffer areas, airspace, and the proper environmental conditions. The supporting infrastructure, including communications capabilities also are required to ensure a working range to meet training requirements. These physical resources may need to be updated or improved in order to maintain current capabilities. An example of the changing needs is as weapons systems change, larger maneuver or buffer areas may be required. In order to have the necessary land or space required, range areas may need to be shifted or additional land purchased to ensure continued use of the range.

The RCMP will identify and describe current physical range resources—real estate, range instrumentation, targets and target arrays, integrated air defense systems (IADS) and electronic warfare (EW), scoring and feedback systems—that support the training tasks. In addition to physical resources, the RCMP will describe the existing range management, control, and clearance resources, processes, and procedures that ensure safe and sustainable range operations. Where needed, the RCMP will recommend revisions to these managerial resources that can enhance range management, control, clearance, and training operations.

4.2.3.2. Current Investment Initiatives

Ongoing investment is necessary to ensure the current operational capability of range resources. The Range Complex Investment Team will research the current investment initiatives such as the TAP, Regional Shore Infrastructure Planning (RSIP), and the Live Tactical Training Range Instrumentation Roadmap (LTTR).

For example, in order to know how to develop an investment strategy, Navy IDTC training requirements will need to be analyzed. These requirements will then need to be applied to the SOCAL Range Complex, and compared against the existing complex capabilities. This will require interviews at CPF, CNAP, CNSP, CSP, NSW, Naval Base Coronado, SCORE, and SPAWAR.

In addition, the R2R study determined that range management plans must integrate range sustainment planning across all investment areas using GIS as an integrating tool across functional areas. This integrating process applies to the RCMP as well. Investment areas include:

- Opposing forces
- Land and sea area
- Airspace and low level routes
- Targets
- Manning
- Maintenance
- AA&E Logistics Support
- Instrumentation

- Communications
- Infrastructure
- Unexploded ordnance and residue clearance
- Environmental, natural and cultural resource management
- Regulatory and public outreach
- Mapping and Charting

The Range Complex Investment Team will need to collect data from OPNAV on how the newly-appreciated range shortfalls are going to figure into the Program Objective Memorandum (POM) planning process.

4.2.3.3. Desired Investment Products

Naval Commands will provide investment funding to the SOCAL Range Complex through various funding mechanisms, including Range Operations Support (ROS), Base Operating Support (BOS), and Military Construction (MILCON). The goal of the investment funding is to reduce the vulnerabilities to the SOCAL Range Complex, and in the long-term, to provide for future operations and range capabilities.

4.2.3.4. Summary of Investment Strategy Process

This first step is to evaluate the range capabilities needed to accomplish the training tasks as identified through interviews with COMPACFLT, COMTHIRDFLT, Type Commanders, CCG-1 and other range users. Once the capabilities are identified, a matrix showing each range area and the training tasks supported will be developed. This matrix will identify shortfalls or limited resources, summarized in a range mission deficiency matrix, and shortfalls that could result in loss of range use. Once the current range assessment is complete, an assessment will be made as to future range requirements out to the year 2012. The investments required to upgrade the current range to meet these new needs will be identified. The investments will be prioritized based on current investment initiatives such as TAP or RSIP and will be categorized on the basis of the type of funding required (ROS, BOS, MILCON).

4.3. RCMP Template

The SOCAL RCMP will be based on the template developed during preparation of the Cherry Point/Camp Lejeune RCMP, as it becomes available. Adherence to the Cherry Point/Camp Lejeune RCMP template will ensure that the RCMPs for all 21 Navy and 10 Marine Corps range complexes are standardized.

4.3.1. Databases

SOCAL RCMP database development will proceed in coordination with the Navy and Marine Corps IT framework. The database will serve as a data collection tool for the services to use during the periodic Range Complex Sustainability Review (RCSR) to update the RCMP.

After the RCSR is finalized, a range database specialist will convert the RCSR into an electronic database that supports a structured decision-tree pathway. The specialist will complete the task by translating the RCSR documents into a database design comprised of forms, data tables, and relationships. The database interfaces or menus will be developed to act on the database using a decision-tree pathway structure. The database portion of the RCSR will be developed in Microsoft Access, a format compatible with the future Navy and Marine Corps IT framework.

4.4. Information Technology (IT) Framework

The goal of the RCMP project, as it relates to information technology (IT), is to ensure RCMP compatibility with envisioned Navy range IT frameworks. Accomplishing this goal will involve:

- Participating in meetings for developing range IT requirements and frameworks
- Monitoring developments and modifying the RCMP as necessary to enhance future compatibility
- Archiving data in Microsoft Access format to ensure transportability into envisioned databases

An RCMP group composed of range operations specialists, database developers, and GIS/IT managers will participate in these ongoing tasks. Participation in the meetings on the IT framework will include developing lessons learned during the creation of the RCMP and range database(s). The team will also periodically review the RCMP data storage formats to ensure they remain compatible with developments in the range IT framework. These reviews will require making necessary changes to the data formats should compatibility issues arise. A Microsoft Access database or databases will archive the data collected during the development of the RCMP, serve as a tool for completing future RCMPs, and provide a standardized data collection tool for other RCMPs. See Section 6 for a further description of the data collection procedures.

5. PLAN OF ACTION AND MILESTONES (POA&M)

The following section describes the responsibilities and roles of the three specialized teams: Range Operations, Range Sustainability, and Range Investment, during each major section of the RCMP project and provides the major project milestones. Appendix B, Plan of Action and Milestones (POA&M), contains the RCMP project schedule that includes the milestones presented below and proposed site visits, data collection trips, and data analysis trips.

5.1. Workplan

All three RCMP teams are participating in the development of the Workplan by making contributions to their respective areas of responsibility. The following table contains the milestones in development of the draft and final Workplan.

| Milestones | Due Date |
|---------------------|---|
| Kickoff Meeting | 11 October 2002 |
| Draft Workplan | 30 days after Kickoff Meeting |
| Government Comments | 14 days after receipt of Draft Workplan |
| Review Meeting | 3 December 2002 |
| Final Workplan | 14 days after Review Meeting |

5.2. Prototype SOCAL RCMP

The RCMP is organized into three major sections: Range Complex Operations, Range Complex Sustainable Management, and Range Complex Investment Strategy. The RCMP teams coordinate and collaborate in the development of each section, however one team is assigned the lead role for each section. The table below lists the sections of the RCMP and the corresponding lead and supporting teams.

| RCMP Section | Range Operations Team | Range Sustainability Team | Range Investment Team |
|---|-----------------------|---------------------------|-----------------------|
| 1. Range Complex Operations | Lead | Supporting | Supporting |
| 2. Range Complex Sustainable Management | Supporting | Lead | Supporting |
| 3. Range Complex Investment Strategy | Supporting | Supporting | Lead |

The following table lists the major milestones for the prominent deliverables, Government comments, and meetings.

| Milestones | Due Date |
|------------------------------------|---|
| Interim Draft Prototype RCMP (75%) | 240 days after Final Workplan submittal |
| Government Comments | 30 days after receipt of Interim Draft |
| Review Meeting | 7 days after receipt of Gov't Comments |
| Draft Prototype RCMP (100%) | 60 days after Review Meeting |
| Government Comments | 21 days after receipt of Draft RCMP |
| Review Meeting | 7 days after receipt of Gov't Comments |
| Final Draft Prototype RCMP | 21 days after Review Meeting |

6. DATA COLLECTION AND RECORD KEEPING

The RCMP teams will collect data and maintain records throughout the project using a series of record keeping tools that will include: an administrative record, contact reports, operations data sheets compiled in an operations scenario book, an Access database archive, and a GIS database. The following is a description of each of these tools and the standards the team will employ to ensure detailed records of the work performed and data collected are maintained.

6.1. Administrative Record

Draft and final documents, meeting minutes, transmittal letters, point papers, and briefings will be recorded in both electronic and paper formats as an administrative record. In paper form these documents will exist in a series of deliverable notebooks. Electronic versions of all the documents will be maintained on CD-ROM in Microsoft Word, PowerPoint, Excel, or Adobe PDF. Maps and charts, spatial (GIS) data layers, and metadata will be recorded in electronic formats as describe below in the Spatial Data Standards section.

6.2. Contact Reports

During the data collection phase, team members will complete contact reports for each interview conducted. The contact report will capture the contact information for interviewer and interviewee, the purpose of the

interview, and a summary of the discussion (see Appendix C for the Sample Contact Report Form). The contact reports will be stored in both electronic (Microsoft Word) and paper formats.

6.3. Operations Scenario Book

During the course of the project, the Range Operations team will collect and analyze information on a selected set of operations that occur within the SOCAL Range complex (see Appendix D for the Sample Operations Data Form). These operational data will be recorded in an Operations Scenario Book. The book will contain overall summary data and details on each operation including the sequence of events, ordnance used, ranges used, and number and type of participants.

6.4. Access Database Archive

Database and information system specialists will archive the range operations and range complex data collected in a Microsoft Access database so that it will be in a database format compatible with future Navy IT initiatives. The database will use customized forms to store data on ranges and operations in the SOCAL Range complex. The data tables in the database can then either be accessed directly within the larger Navy IT architecture or converted into other database formats depending upon the IT requirements.

6.5. GIS Database

The GIS staff will collect and manage geographic or spatial information in a GIS database structure consistent with the Spatial Data Standards for Facilities, Infrastructure and Environment (SDSFIE), Release 2.10, January 2002. The GIS staff will use ESRI ArcInfo Workstation and ArcGIS Desktop products (version 8.2 or later) for data processing, analysis, map/chart production, and metadata creation. During the course of the project, the GIS staff will collect GIS data from existing CADD and GIS databases and create new data layers as required.

Geographic or spatial data created or used as part of the RCMP will be documented in accordance with standards published by the FGDC in "Contents Standards for Digital Geospatial Metadata." The GIS staff will use the ESRI ArcCatalog software to generate the metadata in the appropriate format.

Delivery of geographic or spatial data will adhere to the specifications listed in Section III, Part D of the Statement of Work (SOW), and the recently released Office of Management and Budget (OMB) Circular Number A-16, August 2002.

6.6. SOCAL Project Website

The contractor team will pursue developing a web-based SRS/E&E internal project tracking system with form, contact report, and document management capabilities.

References

2002. United States Navy. (Plover Picture on Cover)
http://meso.spawar.navy.mil/Newsltr/Fy00/No_1/snowy_plover.html

APPENDIX A: WORKING RCMP OUTLINE

SOCAL Range Complex Management Plan OUTLINE

Chapter 1 – Executive Summary

Chapter 2 – Introduction to the RCMP

1. Military Mission
2. Navy Readiness
 - a. Fleet Training Strategy (FTS)
 - b. Inter-Deployment Training Cycle (IDTC)
 - c. Joint Training
3. RCMP Goals
4. Project Scope – Geographical and Operational
5. Methodology
6. Updating Procedures – 5 years

SECTION 1: RANGE COMPLEX OPERATIONS

Chapter 3 SOCAL NAVY Range Complex Description

1. Complex-Wide Overview
 - a. Regional Setting
 - 1) Area of Battlespace
 - 2) Proximity to User Home Bases (Acknowledge use by PACNW ships)
 - 3) Training Media
 - 4) Weather
 - 5) Other Regional Range Complexes
 - b. Training Area Summary
 - 1) Airspace Overview
 - a) Maneuver Space
 - b) Low Level Routes
 - 2) Off-shore Areas Overview
 - 3) Near-shore Areas Overview
 - 4) On-shore Areas Overview
 - c. Supported Training
 - 1) Qualification
 - 2) Basic
 - 3) Intermediate
 - 4) Advanced
2. Individual Range/OPAREA/SUA Descriptions
 - a. OPAREAs within W-291
 - 1) W-291
 - 2) TMA P1-P8 (Same topics as above)
 - 3) MISR 1W/1E/2
 - 4) SCI Range Complex/Adversary Island

- 5) NAOPA
- 6) W-291 Range Management and Operation
 - a) Organizational Relationships
 - 1. Frequent Users
 - 2. Intermittent Users
 - b) Range Management Structure
 - 1. Scheduling Authority
 - 2. Scheduling Procedures
 - 3. Range Control and Safety
 - 4. Range Inspection
 - 5. Coordination Procedures
 - c) Range Assets
 - 1. Instrumentation
 - 2. Feedback Mechanisms
 - 3. Communications
 - 4. Targets
 - 5. Infrastructure
 - d) Training and RDT&E Operations Overview
 - 1. Ordnance
 - 2. Range Utilization
 - e) OPFOR – Threat Representation
 - 1. Tactical Warning and Threat Assessment
 - 2. Electronic Warfare
 - 3. Modeling and Simulation
 - f) Links to Other Ranges
 - 1. Live
 - 2. Virtual
 - 3. Constructive
 - g) Airspace Operations
 - 1. Airspace Description:
 - 2. Scheduling Procedures
 - 3. Controlling Procedures
 - 4. Data Collection Procedures
 - 5. Airspace Restrictions
 - 6. Coordination Procedures
- b. OPAREAs near Camp Pendleton Area
 - 1) Camp Pendleton San Onofre High/Low Military Operations Area (MOA)
 - 2) Camp Pendleton Amphibious Assault Area (CPAAA)
 - 3) Camp Pendleton Amphibious Assault Training Area/Artillery/Aircraft/Bombing and Strafing Range: R2503 A/B/C
- 4) Camp Pendleton Amphibious Vehicle Training Area (CPAVA)
 - c. NB Coronado and other Operational Areas
 - 1) SSABA
 - 2) SPCOA
 - 3) ARPA
 - 4) ENETA
 - 5) WSCOA
 - 6) NRRF
 - 7) NB Coronado
 - d. Naval Special Warfare Tactical Range Complex

- 1) San Clemente Island Maritime Operations Facility
 - 2) Camp Billy Machen Desert Warfare Training Facility (to be covered in detail in MCAS Yuma Range Plan)
 - 3) La Posta Mountain Warfare Training Facility
 - 4) Camp Pendleton Naval Special Warfare Shooting Facility (to be covered in detail in MCB Camp Pendleton Range Plan)
 - 5) Naval Amphibious Base OPAREA
3. SOCAL Range Complex Contribution to Training Readiness
 - a. Ability to accomplish Primary Training Elements
 - b. Instrumentation (WISS, TACTS, Strafe, EW, Underwater, Laser)
 - c. Uniqueness (Essentiality, Surge Capability, Expansion Potential)
 - d. Ordnance (Range of Live/Inert weapons)
 - e. Target Quality and Quantity
 - f. Proximity to training units
 - g. Warfare Areas supported
 - h. Training Levels Supported (Basic, Intermediate, Advanced)
 - i. Utilization (hours per year)
 - j. Area of Battlespace (sq nm of land, OPAREA, SUA)
 - k. Training Media (Air, Surface, Subsurface, Land, Vertical Development)
 - l. Weather

Chapter 4 – Current Range Complex Operations

1. IDTC
2. NMETLs Description
3. Overview of Representative Operations
 - a. Unit Level Training Operations
 - 1) ACM
 - 2) Air ASW
 - 3) Surface ASW
 - 4) Sub ASW
 - 5) TORPEX
 - 6) GUNEX/CIWS
 - 7) BOMBEX
 - 8) EW Ops
 - 9) MCM
 - 10) Mining Ops
 - 11) A-A MISSILEX
 - 12) S-A MISSILEX
 - 13) NSFS
 - 14) Strike
 - 15) CAS
 - 16) HARMEX
 - 17) EOD Ops
 - 18) SEAL FTX/ORE/FMP
 - 19) NALF SCI Ops
 - 20) Amphibious Operations
 - 21) UWD
 - 22) CSA
 - 23) SDV
 - 24) LAND BASED EOD

- 25) COTS
- 26) OBFS
- 27) Physical Training (PT)
- 28) SBT
- 29) ASDS
- 30) NSW Ground Mobility

b. Joint and Combined Training Operations

- 1) JTFEX
- 2) C2X
- 3) SACEX
- 4) SOCEX
- 5) Joint Exercises (MC)
- 6) Kernal Blitz

c. RDT&E

Chapter 5 – Strategic Planning (10 Year Planning Horizon)

- 1. Strategic Vision
- 2. Strategic Mission Objectives/Concept of Operations
- 3. Factors Influencing Future Requirements
- 4. Future Range Complex Operations in a Joint Context
- 5. Purpose and Needs Statement
- 6. Requirements Analysis
- 7. Link of NMETL to Current and Future Range Operations

SECTION 2: RANGE COMPLEX SUSTAINABLE MANAGEMENT

Chapter 6 – Encroachment and Sustainment Challenges

- 1. Encroachment Effects on Sustainment and Readiness
 - a. Creates Large Avoidance Areas to protect Endangered Species
 - b. Reduces Number of Training Days
 - c. Segments Training and Reducing Realism
 - d. Prohibits Certain Field Training Events
 - e. Inhibits Development of New Tactics to meet new and emerging threats
 - f. Reduces flexibility and increases planning for range access
 - g. Raises altitudes for flight training
 - h. Limits application of new weapons technologies
 - i. Complicates night and all-weather training
 - j. Reduces live fire proficiency
 - k. Increases personnel temp (time away from home station)
 - l. Greatly increases O&M costs
- 2. Regional urban Growth and Commercial Development
 - a. Airspace
 - b. Airborne Noise (AICUZ)
 - c. Public Safety (UXO, RAICUZ, etc)
 - d. Civilian Access
 - e. Potential Impact on regional ecosystem
- 3. Environmental Regulations and Effects

- a. Regulations governing maritime use, air and water quality, etc.
- b. Environmental resources management
- c. Impacts to protected, threatened, and endangered species
- d. Devegetation
- e. Wildlife history and potential
- 4. De-Vegetation and Wildfires
- 5. Frequency spectrum encroachment
- 6. Litigation and Other Potential Threats

Chapter 7 – Sustainable Range Complex Management

- 1. Sustainability Principles
 - a. Sustainability Principles (land use approach)
 - b. Sustainability Management Function at SOCAL Complex
 - c. Balancing Operations and Environmental Stewardship
 - d. Planning for Range Sustainment through 2012
- 2. Roles and Responsibilities in Managing and Mitigating Risk to Range Complex Readiness
 - a. CNRSW Enhanced Readiness Team (ERT)
- 3. Environment Blueprint
 - a. At-Sea Policy
 - b. Environmental resource management
 - c. Integrated Natural Resources Management Plan
 - d. Cultural Resources Management Plan
 - e. Environmental Planning
 - National Environmental Policy Act (NEPA) studies:
 - Marine Mammal Protection Act (MMPA)
 - Clean Air Act Conformity Assessment (CAACA)
 - Marine Species Density Data (MSDD)
 - Essential Fish Habitat (EFH)
 - Biological Assessment (BA)
 - Coral Reef Analysis (CRA)
 - Cultural Resource Survey/Programmatic Agreement (CRS/PA)
 - Coastal Consistency Determination (CCD)- Incidental Harassment Authorization/ Letter of Authorization (IHA/LOA)Range Air Installation Compatible Use Zone (RAICUZ) Plans Proposed Action
 - f. Range Complex Safety Program
 - g. Range Sustainability Environmental Program Assessment (RSEPA)
 - h. Coordination with other Planning Efforts
- 4. Coordination of Range Initiatives
 - a. Operational Range Clearance
 - b. Ordnance and explosive management
 - c. Range Safety/Security
 - d. Logistics
 - e. AA&E Accountability (handling, storage, and transportation)
 - f. Funding Support
- 5. Record-keeping and Monitoring
 - a. Munitions
 - b. UXO
 - c. Hazardous constituents
- 6. Range Inspection
 - a. Service Life Extension Program

- b. General Range Maintenance
- c. Range Refurbishment
- 7. Community Involvement
 - a. Regulatory Outreach
 - b. Stakeholder Involvement

SECTION 3: RANGE COMPLEX INVESTMENT STRATEGY

Chapter 8 – Range Complex Requirements Summary

1. Range Requirements to support Fleet, NAVSPECWAR and MAGTF Training
2. Opposing Forces
3. Airspace
4. Land, Sea Space and Buffer Zones
5. Range Instrumentation
6. Targets and Target Arrays
7. Range manning
8. Maintenance
9. AA&E Logistics Support
10. Instrumentation (Scoring and Feedback Systems)
11. Integrated Air Defense System and EW
12. Supporting Infrastructure
13. Communications
14. Environmental
15. UXO and Range Clearance
16. Range Management and Control
17. Regulatory and public outreach
18. Mapping and Charting

Chapter 9 – Current Investment Initiatives

1. TAP
2. RSIP
3. TRS
4. Tactical Training Range Instrumentation (OP789 POM)

Chapter 10 – Recommended Investment Products

1. Range Operations Support (ROS)
2. Base Operating Support (BOS)
3. Military Construction
4. Future Operations Investment Planning
 - a. Operational Realism
 - b. Warfare Training Instrumentation
 - c. RDT&E
 - d. Vulnerability Mitigation

APPENDIX B: PLAN OF ACTION AND MILESTONES (POA&M)

Plan of Action and Milestones

| Range Sustainability Timeline | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|---------------|------|-----|-----|-----|-----|------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|--|
| Milestone | Date | 2002 | | | | | 2003 | | | | | 2004 | | | | | | | | |
| | | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | |
| A. Workplan | | | | | | | | | | | | | | | | | | | | |
| Kick-Off Meeting | 11-Oct-02 | | | | | | | | | | | | | | | | | | | |
| Site Visit | TBD | | | | | | | | | | | | | | | | | | | |
| Draft Workplan | 11-Nov-02 | | | | | | | | | | | | | | | | | | | |
| Government Comments | 25-Nov-02 | | | | | | | | | | | | | | | | | | | |
| Review Meeting | 2-Dec-02 | | | | | | | | | | | | | | | | | | | |
| Final Workplan | 16-Dec-02 | | | | | | | | | | | | | | | | | | | |
| B. SOCIAL RCMP | | | | | | | | | | | | | | | | | | | | |
| Range Data Collection | Nov 02-Mar 03 | | | | | | | | | | | | | | | | | | | |
| Range Analysis | Dec 02-May 03 | | | | | | | | | | | | | | | | | | | |
| Interim Draft RCMP (75%) | 18-Aug-03 | | | | | | | | | | | | | | | | | | | |
| Government Comments | 19-Sep-03 | | | | | | | | | | | | | | | | | | | |
| Review Meeting | 26-Sep-03 | | | | | | | | | | | | | | | | | | | |
| Draft RCMP (100%) | 26-Nov-03 | | | | | | | | | | | | | | | | | | | |
| Government Comments | 17-Dec-03 | | | | | | | | | | | | | | | | | | | |
| Review Meeting | 5-Jan-04 | | | | | | | | | | | | | | | | | | | |
| Final Draft RCMP | 26-Jan-04 | | | | | | | | | | | | | | | | | | | |
| Project Status Briefing | TBD | | | | | | | | | | | | | | | | | | | |
| Work Meetings | TBD | | | | | | | | | | | | | | | | | | | |

APPENDIX C: SAMPLE CONTACT REPORT FORM

RCMP CONTACT FORM

No. __

Name/Company:

Person Contacted:

Organization:

Telephone/Email:

Date:

Reason for Contact:

Summary of Discussion:

APPENDIX D: SAMPLE OPERATIONS DATA FORM

Operations Data Form

Title of Operation
Subtitle

| | |
|-----------------------------|--|
| FXP/PTP Requirement: | <The reference to an official Navy or Marine Corps publication that states the requirement for the operation.> |
| Training Objective: | <The objective of the operation.> |

| Operation Details | | | | | |
|---------------------------|------|----------|------------|---------|---------|
| Category | # | Baseline | Normalized | Alt. 1 | Alt. 2 |
| Operations | # | | | | |
| Participants | | | | | |
| Aircraft | # | | | | |
| Support Aircraft | # | | | | |
| Ships | # | | | | |
| Support Boats | # | | | | |
| Submarines | # | | | | |
| Amphibious Vehicles | # | | | | |
| Ground Units | # | | | | |
| Ordnance | | | | | |
| Torpedoes | # | | | | |
| ASW Targets | | | | | |
| Recovered | # | | | | |
| Not Recovered | # | | | | |
| Subtotal ASW Targets | # | | | | |
| Sonobuoys | # | | | | |
| Mine Shapes | # | | | | |
| Missiles | # | | | | |
| Smokey SAMs | # | | | | |
| Aerial Targets | # | | | | |
| Artillery Shells | # | | | | |
| Naval Gun Shells | # | | | | |
| Cannon Shells | # | | | | |
| Inert bombs | # | | | | |
| Live bombs | # | | | | |
| Mortars & Grenades | # | | | | |
| Chaff | # | | | | |
| Flares and Smoke | # | | | | |
| Lasers (if any) | # | | | | |
| Small Arms Rounds | # | | | | |
| Explosives | lbs | | | | |
| Activities | | | | | |
| Range Area/Location | | | | | |
| Utilization | #/yr | | | | |
| Typical Altitudes | ft | | | | |
| Typical Target Speed | kts | | | | |
| Typical Duration | hrs | | | | |
| Range Time | | | | | |
| Above 3,000 ft | % | | | | |
| Below 3,000 ft | % | | | | |
| Range Time | | | | | |
| Inside 12 nm | % | | | | |
| Outside 12 nm | % | | | | |
| Seasonality of Operations | | Jan-Mar | Apr-Jun | Jul-Sep | Oct-Dec |
| | % | | | | |

Source: