

# **ENFORCEMENT PROGRAM STAFFING REQUIREMENTS**



## **STUDY REPORT**

**Presented to the  
Washington Department of Fish and Wildlife  
by the International Association of Chiefs of Police**

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## INTRODUCTION

In March of 2008, the Enforcement Program of the Washington State Department of Fish and Wildlife (WDFW) contracted the International Association of Chiefs of Police (IACP) to examine its field patrol and administrative staffing requirements. Field work commenced almost immediately. This report presents the results of our work.

## STUDY OBJECTIVES

Objectives of the patrol allocation and deployment study were to:

- ❑ Determine law enforcement workload by law enforcement and administrative function and by geographical area.
- ❑ Determine the number of law enforcement officers required to address workload.
- ❑ Deploy and allocate officers required to address workload by law enforcement responsibilities and by geography.
- ❑ Document staffing calculations and provide a dynamic model that can be used for future allocation and staffing.
- ❑ Identify and consider alternative/supplementary staffing options, such as mutual aid, contracting, technological innovations and civilianization.
- ❑ Optimize the deployment of current officers by responsibilities and by geographical area.

## STUDY TEAM

Dr. Robert E. Ford, University of Central Florida, IACP Senior Associate Consultant, conducted staffing, deployment, variable/multiplier development, and data analysis, resulting in the calculated staffing and deployment requirements. Randall Carroll, Associate Consultant, conducted regional focus group meetings, interviews with department management, and assisted with data collection. Palmer Wilson, Senior Associate Consultant, conducted extensive field-work, data collection, organization and analysis, as well as assisted Dr. Ford with the deployment multipliers analysis and report production. Jerry Needle, Director of Programs and Research, IACP, managed the study and edited the final report.

## ACKNOWLEDGMENTS

The IACP study team acknowledges the exceptional support received from WDFW/Enforcement Program executive, command, and support staff:

- ❑ Chief Bruce Bjork
- ❑ Deputy Chief Michael Cenci
- ❑ Jonathan Neville, Management Analyst and Project Coordinator

Important contributors who must be acknowledged include:

- ❑ Captain Mike Whorton, Captain Chris Anderson, Captain Rich Mann, Captain Bill Hebner, Captain Murray Schlenker, and Captain Dan Brinson. These regional commanders provided invaluable assistance during our fieldwork and as subject matter experts.
- ❑ Numerous supervisors, officers and civilians, both within the Enforcement Program and other Washington State departments, assisted staff and provided information, data and explanation of tasks and responsibilities of field enforcement officers. Of specific note are Lieutenants Nicks, O'Hagan, and Volz.
- ❑ Specific thanks are offered to those officers who hosted study staff in the front seats of their vehicles, essentially their office, and have consistently made themselves available when we had questions. While many assisted, two stood out in their openness, Officers Wendy Willette (Region 4) and Greg Haw (Region 6) and we thank them for their assistance.
- ❑ Significant data support was received from Kimberly Flowers, Project Manager.

### EXECUTIVE SUMMARY

IACP analysis sets WDFW Enforcement Program field officer staffing requirements at 193. This contrasts with current staffing of 96 officers. To lead and support additional officers, IACP recommends an increase in first line supervisors from 22 sergeants to 35. One additional captain and 13 additional detectives are recommended. This package results in a sworn complement of 262.

<b>WDFW ENFORCEMENT PROGRAM RECOMMENDED STAFFING - SWORN</b>				
	<b>Current Staffing</b>	<b>Proposed Staffing</b>	<b>Change - Number</b>	<b>Change - Percent</b>
<input type="checkbox"/> Chief	1	1	0	0
<input type="checkbox"/> Deputy Chief	1	1	0	0
<input type="checkbox"/> Captain	7	8	1	14.3%
<input type="checkbox"/> Lieutenant	5	6	1	20.0%
<input type="checkbox"/> Sergeant	22	35	13	59.1%
<input type="checkbox"/> Detective	5	18	13	260.0
<input type="checkbox"/> Officer	<u>96</u>	<u>193</u>	<u>97</u>	<u>101.0%</u>
<b>TOTAL</b>	<b>137</b>	<b>262</b>	<b>125</b>	<b>91.2%</b>

Multiplying the number of commissioned officers in the field will increase administrative workload at headquarters and in the regions. A proposed initiative to expand the scope and coverage for WildComm requires additional civilian staff and a need to provide additional administrative staff to service the proposed additional officers. Our recommended increase of nine civilian staff in Headquarters and 12 staff assigned in the regions would raise the civilian complement from 24 to 45, 21 additional staff members.

Staffing recommendations are task and workload analysis-based, relying heavily on agency information. A variety of geographic, reporting, and activity information sets were assembled to select and quantify an array of variables upon which numbers and deployment requirements are based. Accordingly, recommendations are data-based and fully defensible. Recommendations are conservative. It is our belief that when additional, more accurate, and quantifiable data are available, support for even higher levels of staffing will be strong.



The seemingly dramatic increases proposed should not surprise those who are familiar with and knowledgeable about the organization. In 1993, the year that WDFW was formed from a merger of the Department of Fisheries and the Department of Wildlife, there were 117 officers and 17 detectives. Between 1993 and 2008, WDFW patrol force staffing declined 18% to 96 officers. During the same period the number of detectives declined 71% from 17 to five. As the number of officers and detectives declined, state population, one prime driver of workload, increased rapidly, 20% from 1993 to 2008. If staff growth had paralleled population increase, patrol and investigator staffing would be much closer to what is presently proposed.

New or expanded initiatives have been assigned to WDFW Enforcement Program officers. Responsibility for control of aquatic invasive species and federal fisheries contracts were added to the workload portfolio. Regulations have become increasingly complex and more demanding of officer time as state and federal authorities attempt to reverse declining fish and shellfish stocks and address the threatened and endangered status of a number of steelhead, Bull trout and salmon species.

Accenting the need for additional officers is the decline in marine fish and shellfish resources, the increase in the number of human/wildlife interactions, and the growing threats to Washington habitats. Finally, like all law enforcement agencies, WDFW shares responsibility for homeland and hometown security. In this regard, the state's international border and numerous waterways and ports present an omnipresent need for heightened vigilance.

## CHAPTER I. JOB TASK ANALYSIS

This chapter summarizes the results of a modified job task analysis. The objective of the job analysis is to document the activities conducted by the Enforcement Program *officers*, determine the frequency of law enforcement tasks, and estimate the average times consumed to complete tasks. Analysis focused on task determinations relevant to staffing and deployment – factors that trigger field work. Considerations such as amount of physical endurance needed for work components, personality traits associated with successfully addressing components, or training needs are not addressed. This section addresses generalist field officer duties only. Specialized duties such as investigations or aviation are discussed in another section of the report.

An eclectic and comprehensive array of data sources and a range of methodologies were employed to produce findings.

- **Published Documents.** WDFW organization charts; Washington State Statutes; Census and Topographic Information, MOAs (Memorandum of Agreement), including those with NOAA (National Oceanic and Atmospheric Administration) Fisheries; joint enforcement agreements with U.S. Department of Commerce, USDA (United States Department of Agriculture) and NOAA; general orders, codes of conduct; job specifications; and union contracts. Items from the print media and the Internet supplied contextual materials/events/issues. Demographics were collected from national (U.S. Census) and state sources (population estimates).
- **Operations Analysis.** Interviews with headquarters and regional commanders, supervisors, specialists, and officers. Special operations and units studied included: aviation; investigations; communications; training; hunter education, and logistics. Collateral law enforcement responsibilities and associated public safety efforts were analyzed. Hunting and fishing regulations were assessed, with emphasis on seasons. The literature on land management law enforcement roles (national and local) were reviewed. Regional and Marine plans for 2007 were analyzed.
- **Focus Groups.** Seven focus groups were assembled to gather and develop information and insight on and into division operations and needs. Each region and the marine division were represented. Using daily activity reports, input on key tasks, criticality of tasks, and suggested workload drivers, focus group work helped us to frame the job analysis questionnaire.

- ❑ **Field Observations.** Fieldwork was conducted at WDFW work sites to identify key work and select and develop workload measures.
- ❑ **Interviews.** Interviews were conducted with a number of stakeholders including legislators, directors, assistant directors, other agency employees, and the Enforcement Advisory Committee. Also reviewed were the results of recent program public opinion surveys. These interviews and surveys provided a broad sense from the public as to perceptions of workload and tasks.
- ❑ **Job Analysis Questionnaire.** A questionnaire was employed to gather information on officer perceptions of their work, insight into agency culture, and to identify issues of significance for deployment work. One hundred and three (103) questionnaires were returned, 80 from officers and 23 from supervisors and detectives.
- ❑ **Databases.** Information included: crime/violation patterns (EARS); calls-for-service/activity (State Patrol-Computer Aided Dispatch); workload distribution (EARS); marine division inventory; managed/patrolled lands (Agency Administered Lands, Contract Lands); county demographics (population, area, crime activity); hunting/fishing licenses (place of purchase and type); registered watercraft (by county and including accident and citation data); shoreline configurations (coastal, rivers, lakes, bays). It is important to note that databases providing information on location where hunting and fishing licenses and vessel registrations were sold does not necessarily equate with where hunting, fishing or boating actually occurs.

## **SECTION 1: AUTHORITY AND MISSION**

The Washington Department of Fish and Wildlife was created in 1993 by the legislature (RCW 43.300.010), merging the Departments of Fisheries and Wildlife. The Enforcement Program, the focus of this report, is a program within the WDFW. The Enforcement Program is a general authority law enforcement agency (RCW 10.93.020).

WDFW is directed by the Fish and Wildlife Commission. RCW Chapter 77.04 establishes the agency mandates, qualifications, and duties. Specifically, the Department and Commission shall preserve, protect, perpetuate, and manage fish (to include food fish, game fish, and shellfish in state and offshore waters), and wildlife, and protect their habitats. A WDFW Director reports to the Commission and provides day to day direction and management. An Assistant Director of WDFW (also titled

Chief) reports to the Deputy Director of WDFW and is responsible for managing the WDFW's Enforcement Program.

Fish and Wildlife Department Enforcement Program officers are empowered by state law and have general authority to enforce state criminal laws throughout the state of Washington. WDFW officers have primary responsibility for enforcement of Title 77 - Fish and Wildlife. Officers hold county commissions and some city commissions and are charged with enforcing city/county ordinances as they relate to trespass, hunting, fishing, and boating safety. Officers also hold other state and federal law enforcement authority to enforce other state and U.S. Code under the Joint Enforcement Agreement.

While statutes and the grant of police authority establish the parameters, the agency mission directs and focuses activities of officers:

The Washington Department of Fish and Wildlife (WDFW) serves Washington's citizens by protecting, restoring and enhancing fish and wildlife and their habitats, while providing sustainable and wildlife-related recreational and commercial opportunities.

WDFW officers are general authority peace officers and can take enforcement action against a wide range of criminal activities. However, department policies and directives focus emphasis on the agency's primary mission. While officers can and do enforce traffic laws, program regulation notes: "Traffic law enforcement is not the primary mission of the Enforcement Program; therefore, officers shall not routinely contact persons for minor traffic-related violations." Policy further directs WDFW officers to make traffic contact when a vehicle operator is negligent or threatening and recommends that officers take appropriate action if they observe a criminal traffic offense.

Analysis found that officers focus on the agency mission and that general criminal enforcement is limited and most commonly a byproduct of mission related activities. Identification of a felon carrying a firearm while checking hunting licenses in the field is an example.

## **SECTION 2: JOB PREPARATION AND TRAINING**

New officers attend the Washington Criminal Justice Training Commission's Basic Law Enforcement Academy (BLEA), a facility shared with officers/recruits from other law enforcement agencies. The basic course consists of 720 hours of training. When basic is complete, officers receive peace officer certification.

Following the Basic Law Enforcement Academy (BLEA) is a 160 hour in-house academy in Olympia which trains officers on codes and regulations specific to resource protection and agency policies and procedures. Officers then begin the Field Training Program, 12 weeks long, over 500 hours of observation and training.

Training proves a significant expense for WDFW's Enforcement Program. Required training significantly impacts staff availability since significant staff time is spent in training. Initial training consumes 34 to 40 weeks, the better part of the first year of employment. Officers are not available for assignments until training is fully completed. Staffing calculations must consider pre-service training, 3-5% of available officer career hours. This cost for the organization is exacerbated when turnover occurs. Some departments budget above authorized complement to compensate for pre-service training.

Maintaining certification requires considerable continuing training. Legally mandated yearly in-service, liability-oriented training, skills enhancement, and annual firearms re-qualification, also deduct from available hours. WDFW officers must receive specialized training for equipment (vessels, off-road vehicles, special weapons such as Immobilization Guns). As specialists, WDFW officers require in-service training to address the broader array of laws enforced and the range of complex equipment they utilize. In 2007, commissioned staff engaged in 19,402.6 hours of training, an average of 140.6 hours of training per commissioned officer. Trainers (officers with certifications to train) spent an additional 4,092 hours conducting training.

Questionnaire responses from officers and focus group discussions emphasized the impact of required training on officer time and noted the need to use staff to serve as trainers. This results in extra training for the trainer, and the trainer being absent from regular duties. In focus groups, almost every region discussed the loss of service of trainers. As resource laws and equipment continue to become more complex, demands for in-service training will increase.

Full police powers have important work-related implications. Workload analysis demonstrates the presence of a constellation of standard law enforcement duties - traffic stops, DUI stops, backup of officers from other agencies, drug arrests, and intervention in crimes that occur in the presence of WDFW officers. This can be particularly seen with WDFW patrols of WDFW access areas. WDFW officers patrol these areas, checking on licenses, bag limits and proper permits for vessels and trailers. While conducting these checks, all too often officers find underage drinking, vandalism, drug use, and disturbance of the peace, as well as wanted persons and vehicles, resultant of license and vehicle tag status checks. This often leads to law enforcement action, citation or arrest.

The result of this broad grant of statewide police authority, while attractive in terms of employability (e.g., response to state-wide emergencies), increases attention to training subjects that might otherwise not be in the resource protection domain. By taking these training courses, WDFW officers continue to be an attractive resource and universally deployable for state or local emergencies, protective services, and homeland security details.

### **SECTION 3: ORGANIZATION AND STAFFING**

The Enforcement Program is currently staffed with 161 full time personnel, 137 authorized commissioned officers, and 24 civilian employees. Civilian employees include four hunter education staff, two aircraft pilots, two mechanics, and eight administrative staff. There are also the equivalent of two full-time positions vested in part-time employees who work for hunter education and deer/elk herding. Due to restrictive budgets and retirements, current staffing is somewhat lower than in 2007, the year studied to set staffing and deployment numbers. In later sections of the report some minor differences in line officers may be encountered as statistical data for 2007 is analyzed.

A Chief (Assistant Director, WDFW) commands the Enforcement Program. A Deputy Chief serves as second in command. Staff is deployed by six regions, each commanded by a captain. In 2007, a separate marine division served west coastal areas and frequently shared officers and missions with the regions. Early in 2008, the marine division was folded into the regional command, with coastal regions now taking responsibility for marine officers and the marine mission. The regional captains report to the Deputy Chief.

The regions are subdivided into detachments, 21, each supervised by a sergeant. Approximately 89% of staff is assigned to regional operations. There is also a Special Investigations Unit (SIU) and an Aviation/Logistics Unit, both of these are directed by lieutenants. Lieutenants also direct training, vessel operations, and communications.

### **SECTION 4: LAW ENFORCEMENT ENVIRONMENT**

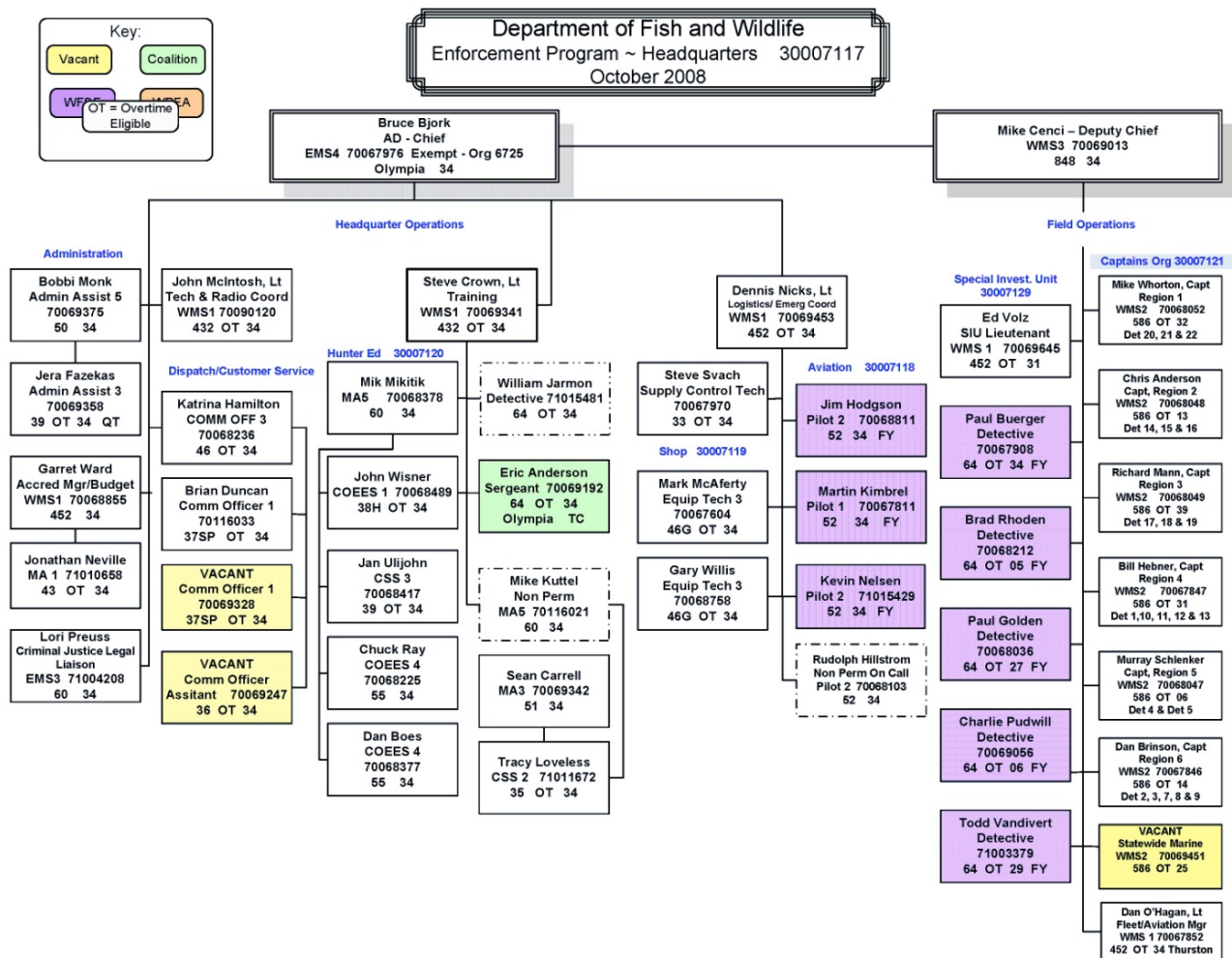
Important themes that dominate the WDFW law enforcement environment are:

- ❑ Organizational Decentralization
- ❑ Administrative Overhead
- ❑ Geography
- ❑ Job Tasks

**Organizational Decentralization.** Officers frequently characterize each region as a separate/independent police department. A number even commented that detachments sometimes operate independently.

These statements reflect a dilemma common to resource management law enforcement. In a state as large as Washington, with its diversity and enforcement needs varying

Table 1



Rank/Title	Hdqts.	Reg. 1	Reg. 2	Reg. 3	Reg. 4	Reg. 5	Reg. 6	Marine	Total
☐ Chief	1								1
☐ Deputy Chief	1								1
☐ Captain		1	1	1	1	1	1	1	7
☐ Lieutenant	5								5
☐ Sergeant	1	3	3	3	3	2	3	4	22
☐ Detective	5 (SIU)								5
☐ Officer	1	13	8	11	14	12	13	13	96
☐ Civilian Pilot	2								2
☐ Civilian	20	1					1		22
<b>Total Sworn</b>									<b>137</b>
<b>Total Civilian</b>									<b>24</b>
<b>Total Staff</b>									<b>161</b>

significantly by region, it is a challenge to a law enforcement manager to maintain mission-centric activities, encourage cooperation and coordination, and ensure compliance with agency directives and policies, while allowing flexibility of different regions to address unique environments.

This challenge is faced not only by most resource law enforcement agencies but by law enforcement agencies such as State Police, the FBI and all other enforcement agencies that are geographically diverse. It is seen repeatedly in previous IACP studies of resource enforcement agencies.

**Administrative Overhead.** Considerable time and effort is expended to manage a statewide enterprise and coordinate and control local efforts. With limited contact due to distance, email, phone calls, and meetings are required to coordinate and direct officer efforts. To ensure compliance, reports, and work-related paper accounting must be used in place of direct supervision.

Time spent on administration is higher than in single site law enforcement agencies where more face to face activity can occur. Not surprisingly, high levels of administrative time are reported by WDFW respondents to the questionnaire. Officers cite an average of one to two hours a day on administrative tasks such as reading and answering emails, doing reports, reading policy, handling evidence, maintaining equipment, and filling out data sheets.



EARS, the Program reporting system, tracks administrative time. Commissioned officers (including supervisors) reported that overall 34.2% of their workday involved administrative activities (2007). The amount of time committed to administrative activity varies by worksite with headquarters' sworn staff spending the most (57.3% of their workday). Regional commissioned staff proportion of time spent on administrative duties ranged from 37.6% of workload in Region 1 to 29% of workload in Region 6. Training is included in administrative activity. Officer training accounts for 23.2% of overall administrative activity. Without training administrative activity falls to 22.4% of overall activity.

Training and administrative activity is, on the average, higher than in municipal law enforcement agencies and sheriff's departments, but similar in percentage of workday devoted to administrative activity to other resource enforcement programs or other decentralized agencies that we have reviewed. The far more complex job tasks, combining traditional law enforcement skills, with knowledge of complex regulations, animal and fish behaviors, and skills at operating a number of transportation modes requires more extensive and continuing training.

The most time consuming administrative task cited by officers, not surprisingly, is preparation of administrative reports. Decentralized agencies rely more heavily upon reports to ensure coordination and control. In 2007, officers report 20,403 hours of report preparation. This accounts for about 8.3% of daily activity. Since the database includes supervisors, average time spent on reports may be a percent or two lower for field officers.

Attending meetings is another important source of administrative work. Officers report 13,125 hours, 5.4% of daily workload. Meetings are a key mechanism to coordinate and control in decentralized agencies.

Geographically diverse organizations also face difficulty providing efficient support services to officers. A considerable proportion of administrative activity involves equipment maintenance. With officers distant from support facilities, they must frequently take care of equipment maintenance and process and store evidence. Due to the diversity of equipment utilized (boats, trucks, ATVs), maintenance and repair can exhaust considerable time. Work often necessitates the use of additional special equipment, commonly a vessel in addition to a vehicle, or all-terrain vehicles, horses, or planes. Officers report 8,082 in maintenance hours, 3.3% of the workday. Marine officers note that for certain larger vessels one day of vessel-related maintenance is required for every day on the water.

Based on interviews, observations, and review of officer worksheets, *IACP estimates that administrative activities, including maintenance, involves on the average about*

*25% of available officer time.* This estimate does not include time officers spend on training, which is accounted for in a later section in our calculations of availability.

**Geography.** Counties and administrative regions are expansive. Travel time to work sites and calls for service take significantly longer than in traditional law enforcement agencies, especially in counties with small numbers of WDFW officers. Travel time has implications not only for meeting attendance and other administrative activities. Also, in many cases, travel to calls takes more time than completion of the calls themselves. Average time per call for service is considerably higher than the 30-35 minutes experienced by traditional police agencies. It is estimated that the time on a call averages between one and two hours, with the majority of time spent simply getting to the call. This is especially true when a physical arrest is made or evidence of significant size or quantity is seized. It is not unusual for the officer to have to seize, transport, and secure an animal carcass that is related to an arrest or citation.

Program regulation places most officers on duty when they leave their residences and enter their vehicle. Considerable duty time is exhausted going to worksites, particularly to boat access ramps. Travel time to meetings at regional headquarters can be lengthy. There is often considerable distance between patrol sites. For example, an officer took over one hour to get to his patrol area from the Regional Headquarters during one ride-along. Given that some officers are responsible for more than one county, the travel time in routine checks of fishing sites, boat access areas, and special events can consume more time than the checks.

Travel times and the extensive areas WDFW officers must patrol have important implications for deployment and staffing. Given travel times, officers must be deployed in such a manner that they can reach key areas within a reasonable time frame. For this reason, in a state the size of Washington, county deployment for officers is required. It will also be argued later, that the requirements of officer safety and regulation (water and night patrols require a minimum of two officers) that officers should be deployed in multiples of at least two per county.

*In resource law enforcement, activities take more time than in traditional law enforcement. Travel time is a major factor in planning, staffing, organization structure, administrative and deployment of officers.*

**Diverse and Complex Work.** The work environment that greets WDFW officers varies significantly by county and region. Enforcement activities in rural areas vary dramatically from the mix found in more urban counties. Water-based enforcement has very different parameters than land-based patrols. Coastal areas present law enforcement demands that differ from those inland. Work varies from West to East and to some extent by season of the year or specific location, such as an access point.

Knowing the changing patterns of an area by season, as well as where vehicles/vessels can access and where they cannot, is important for effective policing. Learning the geography, the channels, and habitat of an area all take time and can fade with no or infrequent exposure. Knowing his/her assigned area is a critical skill for all law enforcement regardless of focus or geography. It is far more difficult for WDFW officers, given the large expanses they must master.

Tasks undertaken by officers also can demand special skills. Captaining an offshore vessel requires considerable skill, and a special license from the USCG. Horses (Region 2 only) demand considerable experience before back country patrols can be routinely performed. Knowing how to address dangerous animals – how to track – all are skills that take time, experience, and often training.

The diversity of work has several important implications for staffing and deployment. *Officers should be assigned to areas that are sufficiently limited geographically* to allow them to effectively learn habitats, travel routes, and other key elements. County level assignment is required for the state of Washington. Also, *deployment to such areas should be long term*. Finally, considerably more training will be required of WDFW officers than traditional police. *In calculating staff availability, a higher multiplier will be required due to training.*

Each of the foregoing characteristics of WDFW law enforcement, higher levels of administrative activity, travel time, and equipment responsibilities, lower availability of officers to address operational workload, a factor which must be taken into account to staff and deploy officers properly.

**The Changing Role.** As Washington changes, the WDFW law enforcement role and work will change. The traditional hunting-related game warden function will demand a declining proportion of officer time as hunting stabilizes or declines in parts of the state. As one officer noted, “The users of our lands are not primarily hunters anymore.” Interviews with officers further substantiated the increasing numbers of recreational, non-hunting or fishing, users of state lands. This pattern is occurring throughout the nation. U.S. Fish and Wildlife Refuges, for example, are seeing dramatic increases in non-hunting or fishing visitation. Some U.S. Fish and Wildlife refuges now rival national parks in visitation. The same phenomenon is occurring on WDFW’s agency-owned land. The needs and safety requirements for hikers, campers, and wildlife viewers require a very different role for WDFW officers.

As the state becomes more urban, animal/human problems will increase. With growing population and threats to natural resources, WDFW officers will increasingly address and investigate environmental crimes and concerns. Officers repeatedly told IACP staff that theft of shellfish resources is increasing, as is the over-catch of fish. All

of these should and will demand more time in the future. Calls for service are gradually becoming a larger proportion of the workload of land-based officers as nuisance wildlife, exotic species (AIS), threatened species, and environmental concerns grow. As urbanization continues to move east toward the Cascades and other traditional wild areas, the nuisance cougar, coyote, moose, and bear calls will continue to increase as their environment shrinks. This was clearly demonstrated with a cougar call at the Tacoma Mall shortly before one of the IACP visits. Issues relative to the differentiation of the response to nuisance wildlife versus dangerous wildlife, was a common theme during all sessions and will be the subject of further discussion.

Marine enforcement should experience even greater change. As population and recreational boating increase, the current number and duration of WDFW marine patrols are likely to become insufficient. With declining stocks of fish and shellfish, there will be increasing calls and pressure to protect remaining stocks. Declining fish and shellfish stocks will raise the value of commercial catches, increasing profits for those who are willing to take illegal actions. Commercial fisheries under pressure will require closer regulation and enforcement. More complex and increased regulation of dwindling fish stocks is already requiring increased enforcement. With the mix of work changing, deployment and staffing patterns will also change.

WDFW law enforcement is changing. Increasingly, resource enforcement is more focused on their general authority as state peace officers. Younger officers are clearly identifying more with a traditional law enforcement role. They appear to view their role as equally split between public safety and resource protection. Older officers, coming from the game warden tradition, focus more on the resource protection mission. Younger officers question (as was common in the questionnaires and focus groups) whether, for example, WDFW officers should be hazing or herding elk, answering injured animal calls, or conducting inspections of hydraulic permits. They argue that these are not law enforcement tasks, and could be more effectively accomplished by other agencies or organizations, or less than fully commissioned personnel.

As population grows and forest lands become an increasingly important recreation resource, an important constellation of self-initiated officer labor involves situations encountered on the roads on the way to patrol destinations, (*e.g., drunk or reckless driving, etc.*). In addition, WDFW officers are increasingly likely to encounter domestic disturbances at campsites, drug use and fights at WDFW water access points, and vandalism and misuse of agency and private lands.

Interviews during the ride-a-longs indicated that officers appear to reserve traditional law enforcement interventions for serious or life threatening situations. As Washington's population continues to grow, however, these non-WDFW directed incidents will only escalate in number and as the nearest available law enforcement

officer, will require action on their part.

With only limited law resources, states are increasingly utilizing their special purpose law enforcement agencies as a source for law enforcement resources during disasters, public safety, threats, and for homeland security related incidents. While this is an obvious benefit of general law enforcement commissions, it can also be but one more additional task drawing on limited personnel and fiscal resources.

While use of WDFW officers as a public safety and homeland security resource is not as pronounced in Washington as in a number of other states, there are indications that WDFW officers may be called upon increasingly in the future to play such a role. WDFW law enforcement has unique assets. Marine capabilities, aviation resources, backcountry expertise, and a wide range of equipment make WDFW capable of responding to a range of enforcement situations that few other law enforcement entities can address.

## **SECTION 5: NATURE OF TASKS**

A 1994 deployment study conducted by the WDFW developed an exhaustive list of tasks performed by WDFW officers. Using a series of focus groups, interviews and observations, IACP reviewed this task list. Our research found that nearly all elements of this 1994 task list are as appropriate today as then. What did differ somewhat was some change in emphasis and additions of several new regulatory responsibilities. Interestingly, there were more WDFW line officers in 1994 (117), than there are now (96).

Focus groups noted that marine mammals and protection of forest products since 1994 were the subjects of increasing enforcement efforts. Regulation of fish cold storage, meat lockers, shooting preserves, hunting/fishing guides, and market places were also receiving more administrative inspections than in 1994. Aquatic invasive species (AIS) such as the zebra mussel are also receiving more attention. There are currently at least three pages of prohibited invasive aquatic species that WDFW is responsible for managing.

Faced with increasing demand for officer services, with fewer officers available, the focus groups noted that less emphasis should be paid to deleterious and exotic animal dealers and wildlife rehabbers. Also rated as deserving of less attention were nuisance and injured wildlife calls. However, as was noted, the public disagrees and when they see an injured deer, or they are dealing with a raccoon chasing their cat, they expect that WDFW officers will respond.

While much of the work remained the same, all focus groups noted that workload had increased significantly since 1995, particularly relative to endangered salmon, declining fish stocks, and increased regulations. Increasing workload was further exacerbated by decreased staffing since 1995. For example, North of Falcon, a process for setting salmon season requirements, has added additional marine patrol requirements, draining resources from other marine tasks. One recurrent theme in all focus groups was that WDFW officers were finding it increasingly difficult to address their workload.

**The Task List:** The 1995 report listed 37 different tasks/emphases that WDFW officers undertake. These tasks are divided into 6 subcategories:

- ❑ Administrative Inspections
- ❑ Enforcement
- ❑ Habitat Protection
- ❑ Other (Public Information, Public Education)
- ❑ Safety Systems
- ❑ Wildlife Control

**Administrative Inspections:** Administrative inspections involve officers checking a series of licensed premises that sell or trade in fish and wildlife products. Examples of administrative inspections include checking on shellfish buyers to ensure that the shellfish for sale were legally obtained. In our 2008 review of the 1995 list, officers suggested the addition of inspections of meat lockers, fish cold storage, and market places.

Officers noted that they were conducting far fewer deleterious, falconer, game farms, license dealers, and wildlife rehabbers, due to the press of other duties. They also noted that insufficient inspections of fish and shellfish wholesalers and dealers were occurring due to personnel limitations.

Administrative inspections from 1995 included:

1. Deleterious (exotic, introduced species)
2. Falconers
3. Fish Buyers (Shellfish\*)
4. Fur Buyer
5. Game Farms
6. License Dealers
7. Taxidermists
8. Game Processors/Meat Cutters
9. Fish Processors
10. Wildlife Trappers

**Enforcement:** Enforcement activities were roughly similar between 1995 and 2008 with officers noting that hunting and fish seasons, prohibited areas, and regulations relative to takes and catches had become much more complex, and increasingly demanding of enforcement patrols – particularly in the marine environment. While increasing patrols are required due to new protective zones, and due to more complex regulations, officers noted exactly the opposite was occurring, there were in fact fewer marine patrols occurring in 2007 and 2008 than in the past. Far fewer night time patrols and anti-poaching initiatives were also being mounted due to the press of other duties.

11. Big Game
12. Commercial Food Fish
13. Commercial Salmon
14. Commercial Shellfish
15. Food Fish
16. Furbearers
17. Game Fish
18. Small Game
19. Sport Salmon
20. Sport Shellfish
21. Threatened and Endangered Species
22. Upland Birds
23. Waterfowl

**Habitat Protection:** Habitat enforcement was particularly focused in 2008 on hydraulic permitting and addressing off-road vehicles and road management. Enforcement against off-road vehicles also appeared to be suffering due to limited ability to mount off-road patrols. A sizeable proportion of Hydraulic Permit Applications (HPA), particularly less critical permits, were not being monitored due to personnel limitations.

24. HPA Enforcement
25. Oil Spills/Toxic Spills
26. Off-road Vehicles
27. Road Management

**Other:** The category focused on public relations and public information. Public relations included officer participation in school programs and county fairs, and participation in the “eyes in the woods” programs. In 2008 participation in public relations was reported decreased as officers were faced with a difficult choice between enforcement duties and public relations.

28. Public Relations

**Safety Services:** Safety services are, according to the focus groups, becoming a more important part of a WDFW officer's duties. In the last decade, WDFW officers have noted that they are increasingly called upon to address public safety issues, ranging from drug use at access areas to marijuana growing on agency lands. With recreational camping and use of wild lands increasing, officers are called upon more to address lost hikers, accidents, disputes, and even domestic violence in forest settings. With Washington's rapidly growing populations, it is anticipated that this trend will continue.

29. WDFW Access Area Patrol
30. Assist Other Public Safety Agencies
31. Boater Safety Checks; Accident Investigations
32. Disabled Motorist/Boater
33. Enforcement of Criminal Law
34. Hunter Education Classes
35. Hunting Accident Investigation
36. Title 69 (Commercial Shellfish from Contaminated Beaches)

**Wildlife Control:** Wildlife control issues are increasing dramatically according to focus group participants. Driven by increasing population and development in previous wild lands, there are increasing dangerous animal calls, injured animal calls, and complaints of deer and elk damage. Such calls, participants argued, will continue to grow. Participants noted that less attention is being paid to injured animal calls, as officers try to address more serious calls. The public is particularly insistent that injured and nuisance animals be addressed.

37. Dangerous Animals
38. Injured Animals
39. Deer/Elk Damage

(Source: State of Washington Department of Fish and Wildlife Enforcement Program, *Role and Deployment Study*, January 1995 p. 39)

## **SECTION 6: ORIGINS OF WORK**

Law enforcement work generates from one of three sources: self-generated work by officers; directed work by supervisors; or calls for service from the public. In municipal police, workload is largely premised on responding to calls for service. In federal



investigative agencies, agents are assigned cases - work is directed by supervisors. For the rangers of the National Park System and the officers of the National Wildlife Refuge system, a significant proportion of the work originates largely from the officers themselves.

Observations, officer reports and questionnaires reveal a more complex picture for WDFW officers. Resource law enforcement traditionally relies upon the work of the resource officer to uncover the majority of crimes and violations. Municipal police, on the other hand, rely more on complainants to uncover and alert municipal officers to crimes and violations. Unlike more traditional law enforcement and similar to National Wildlife Refuge Officers, self-initiated work by officers is the most common origin of officer workload. EARS data reveals that self-initiated patrol work accounts for 100,259.9 hours or 40.9% of total WDFW officer activities and 69.8% of enforcement activities.

This, of course, is not to say that calls for service are not an important part of WDFW officer work. In fact, as Washington's population expands, calls for service become an increasingly important component in the mix of work. Calls for service, often involving dangerous, nuisance, and injured wildlife, seem to be the second most frequent origin of officer workload.

A sizeable proportion of calls for service are received at State Patrol dispatch centers, recorded in a CAD (Computer Aided Dispatch) and transmitted to officers for response. In 2007, WDFW officers responded to 7,899 calls for service from the State Police Dispatch Center. Calls appear to be more common for land-based patrols and are more common in populated areas. Nuisance, injured, and dangerous wildlife calls were the most frequent. A smaller number of calls alerted officers to complaints of illegal hunting and poaching.

While research reveals an average time of 30 minutes per call for service for municipal officers, the time spent by WDFW officers is substantially longer. Observation, officer interviews, and analysis of workload suggest an estimate of 1.5 to 2.0 hours. This time includes often lengthy travel time, time on scene, and time preparing the incident report. Time spent on calls using the conservative estimate of 1.5 hours, results in total time of 11,849 hours of officer labor during 2007.

Ride-a-longs and comments by officers suggest that a significant proportion of calls for service originate from sources other than State Patrol Dispatch Center. During our observations, more calls were received from sources other than the State Patrol Dispatch Center. Many nuisance and injured animal calls were received on officer cell phones directly from citizens (generally in rural areas).

Dispatchers in WDFW also transfers calls to officers. Focus group officers consistently estimated that State Police-dispatched calls account only for about a third of calls for service. Substantial in number, these calls are difficult to analyze since no official records are made.

Directed patrols and assignments from supervisors are the third important workload component. Officers frequently receive assignments to assist other regions, for a specific hunting period or for the duration of a salmon run for example, or to set up a checkpoint at a bass tournament or check out-of-state boats for invasive species. Officers may receive special assignments to address specific areas of concern to the organization – the taking of endangered salmon by sea lions at a Columbia River dam, for example.

One problem that has emerged from self-initiated work is that land-based activities appear to be taking precedence over time on the water. Officer questionnaires reveal that boat-based patrols are declining. It takes time and two officers to launch a boat. It is easier to conduct land-based activities. While officers still address fishing violations they are more likely to conduct compliance checks from the banks or from access areas or approach a shellfish area from landside. They feel that this is a more judicious use of their time.

There were 2,312 hours of vessel patrols in 2007, an average of six hours per day statewide. These patrols covered 1,533 square miles of inland water, 2,537 square miles of coastal waters, 8,000 lakes and ponds, and 3,026 miles of marine shoreline.

Contracts with federal and private agencies is another material source of work. The state has a Joint Enforcement Agreement (JEA) with the federal government to patrol and enforce federal fisheries and endangered species regulations in federal waters adjoining and within Washington. WDFW officers are federally deputized. The JEA mandates are contracts for enforcement patrols for federal marine fisheries. The JEA contract (2007-2009) calls for WDFW to provide 1,300 hours of vessel patrol for salmon and steelhead protection and 1,000 hours of sea patrol for halibut and groundfish protection. In addition to vessel patrols, the 2007-2009 contract calls for 7,000 hours of land patrol checking dockside for illegal catches of salmon, steelhead, halibut, and groundfish. In return, JEA provides reimbursement for salaries and vessel expenses.

WDFW also has other contracts to provide land patrols for certain federal and private properties which will be discussed in a later section.

## **SECTION 7: SEASONALITY**

Many resource-oriented law enforcement agencies face dramatic differences in workload by season. National Fish and Wildlife Refuge officers find summer, fall, and early winter as busiest times, with late winter and spring relatively quiet. National park rangers find winter to have far less work pressure than the summer tourists season – except in national parks in deep southern locales.

WDFW's law enforcement workload appears far more balanced. While the summer season is busy with visitations to wild areas and recreational fishing, the fall probably remains the busiest period with hunts and fishing demanding officer attention. Our review of officer schedules and Regional Yearly Plans found that officer activity varies dramatically by season but workload, while it may entail different duties, remains relatively consistent. Fall brings deer and elk hunting, which demands considerable attention from WDFW officers. However, dangerous wildlife, fishing regulation, anti-poaching and shellfish patrols continue through most of the year. While hunting demands on officers are highest in the fall, fishing demands appear to be highest in spring and early summer.

WDFW officers are frequently moved during the year from their county areas to other areas to provide additional personnel for special hunts, salmon runs, and other resource protections. *Overall, workload appears to be fairly consistent in volume throughout the year while differing in the nature of tasks.*

## **SECTION 8: WORK PATTERNS - OVERVIEW**

All law enforcement agencies, from local to federal, regardless of specific missions, engage in the following core activities:

- ❑ Preventive Patrol (directed and random)
- ❑ Answering calls for service
- ❑ Security (individuals, areas, events, facilities)
- ❑ Investigations/compliance checks
- ❑ Arrest/apprehension
- ❑ Victim services/Citizen services
- ❑ Administrative activities
- ❑ Court appearances/related activities

These core activities are driven by different triggers. There is considerable difference among different types of law enforcement agencies in the proportion of work associated with each core activity. In a forthcoming chapter, these work constellations will be linked to workload drivers.

## **CHAPTER II. IN-DEPTH ANALYSIS OF ENFORCEMENT WORK**

This chapter provides detailed analysis of enforcement work patterns. It begins with analysis of Patrol work, the most critical work performed. Analysis addresses the work officers are currently doing and areas where officers have difficulty completing work, information that is critical for staffing analysis. Calls for service, an emerging and growing area of work, is reviewed. Particular attention is paid to the number of calls to which officers cannot respond, important data for staffing determination. Security, Investigation, Administration, and Public Relations are discussed. This chapter concludes with observations relevant to staffing and deployment.

### **SECTION 1: WORK PATTERNS - PATROL**

Patrol is the most common activity in which WDFW officers engage. Almost 90% of respondents to the job analysis survey cite patrol as their premier function. Field activity reports and field observations support this response. Patrols are both officer and agency directed.

WDFW patrols address a number of missions:

- ❑ Fish Protection
- ❑ Shellfish Protection
- ❑ Wildlife Protection
- ❑ Habitat Protection
- ❑ Protection of Land
- ❑ Public Safety
- ❑ Enforcement of Regulations

As a proportion of total enforcement work, patrol is the most frequent activity. For 2007, EARS records 100,260 hours of general patrol, 40.9% of daily work and 69.8% of enforcement activity.

Enforcement of environmental, game, and fish violations are keyed far more to officer observation than traditional crimes. Traditional offenses are normally brought to the attention of officers by victims. Game and fish violations are less likely to be brought to attention by citizen complaints. Detection of environmental and fish and game violations most commonly result from officers patrolling in areas and at times where and when they anticipate violations may occur.

Patrols are conducted on land and water. Land patrols, most commonly vehicular, are most common, accounting for over 95% of patrol time. Vessel patrols accounted for 2,311.5 hours of patrol time (2.3% of total patrols). Most boat patrols are conducted by the marine division. Inland officers in every region conduct boat patrols on lakes and rivers from time to time. Land patrols are also commonly used to protect the fish and shellfish resource, by patrolling dockside, checking vessels as they come to access points, and surveying shellfish beds from the shore.

Patrols focus on two core missions, resource protection and public safety. Focus varies by area and season. During hunting season the most common land patrol goal is to protect wildlife and regulate harvest. Resource protection patrols prioritize poaching, destruction of habitat, hydraulics, off-road driving, environmental hazards, and hunting/fishing violations.

Wildlife, fish, threatened and endangered species, land, and habitat protection are the focus of the majority of patrols. Patrols to protect fish are most common, 43.8% (43,943.2 hours) in 2007. The second most common patrol category is wildlife protection.

Wildlife patrols account for 27,945 hours, 27.9% of the total. Compliance with shellfish regulations involve 9.2% (9,211.9 hours) of total patrol. Protection of land involve 5,502 hours, 5.5% of the total. Habitat protection involve 1968 hours, about 2% of total patrol hours.

Public safety patrol has been increasing gradually over the last decade. Officers are increasingly likely to encounter issues such as drugs and alcohol and disturbances at WDFW water access points. Drunk driving, calls to assist other agencies, traffic control, trespass issues, vessel safety, and warrant service are taking more time. EARS data confirm officer observations finding that in 2007 WDFW officers devoted 10,340 hours to public safety patrol, about 10.3 % of total patrol time, and 4.2% of total officer workload.

Region 2 has a unique need for public safety patrols. Each year, Gorge Concerts (Grant County) draw a large and sometimes raucous audience. Concerts are broken down into classifications based on the type of audience and the potential for violence: Class 3 (Most violent); Class 2 (Some potential); and Class 1 (Mild). Because of limited funding, officers only work the Class 3 events. A number of homicides, shootings and riots have occurred in the last several years.

Because of high-ticket prices to camp at the Gorge Campground, a privately owned entity, a large portion of attendees tend to migrate onto surrounding public lands to camp and party. These campers cause a great deal of damage and have the potential for

violence. In the Gorge and elsewhere, Region 2 patrols enforce public safety regulations, limit off-road travel and vehicles, address marijuana grow operations, litter, vandalism, drug and alcohol violations, and poaching and fishing violations.

WDFW does not generally patrol around the clock. In the past, night time patrols were more frequent. Staffing limitations limits patrol to daytime hours in most areas. With limited staff, it is difficult to field two officers. Officers complain of the need for and inability to conduct night time patrols since poachers frequently work at night. Our review of schedules confirms that night patrols are not common.

Patrol features a variety of modalities; the most common being vehicle patrol, with vessel patrol second, followed by foot and ATV patrols. Foot and other off-road patrols are increasingly uncommon. Backcountry and off-the road patrol are becoming fewer. The Aviation Unit can provide air patrol. These are uncommon, however, with fewer than 50 hours during 2007. Region 2 still conducts horse patrols. Officers on patrol make frequent contact with citizens. In 2007, patrol officers made 249,498 citizen contacts.

Certain areas require additional patrols, primarily agency owned and administrated lands, cooperative access lands, and a number of other lands under special agreements. WDFW has contracts with private landowners which permit hunting and fishing access. In turn WDFW officers must patrol the areas and ensure compliance with the contracts.

WDFW manages agreements that allow recreational access through private lands to WDFW lands or onto other state or federal agency owned lands for recreational purposes. Access is through "green dot" roads that by contract are patrolled by WDFW during busy use times to ensure that persons stay on open roads. These green dot roads occur on over 300,000 acres of agency owned land as well as under agreements with private land, timber owners and DNR. There are similar agreements with DNR and a few timber companies that allow public access for hunting purposes.

Region 1 patrols 109,980 acres of U.S. Forest Service and private timber companies land under contract. Region 2 administers 176 contracts in Grant and Adams County with 204,208 private acres open to the public. A portion of the contract requires fish and wildlife officers to enforce trespass and access regulations, public safety rules, road management restrictions and check authorization permits. Region 3 manages a number of "Green Dot Roads."

Region 4 has a contractual arrangement with three timber companies to provide dedicated law enforcement services on their properties. The program is reimbursed by these timber companies on an hourly rate basis for all the time officers spend on dedicated services.

Region 5 also has a number of contracts. Region 5 administers for PacifiCorp – 10,000+ acres of land and developed campgrounds with 3,000 surface acres of reservoir and 30 miles of river. It is also responsible for Tacoma City Light, administering 25,000+ acres of land and recreation areas with 3,500 surface acres of reservoir and 10 miles of river. Also contracted is the U.S. Fish and Wildlife Service’s Little White Salmon National Fish Hatchery, a 30-acre site.

In Region 6 there are Cooperative Road Management Agreements with private timber companies, Department of Natural Resources, and United States Forestry Service. These agreements restrict motorized entry to specified areas of timberland, directed to accomplishing a number of goals specific to an area. (Reduced disturbance for wintering elk, protecting calving grounds, providing quality, non-motorized hunting opportunities).

Region 6 also manages a portion of the Hancock Timberland security contract, approximately 400 hours of patrol work between July and December. This is a service reimbursement contract directed at public safety, theft, trespass, general vandalism, above officers’ regularly scheduled activities.

WDFW waterway access areas require more intensive patrols. WDFW waterway access points are popular gathering points that require patrol to reduce vandalism, theft, and to maintain public order and allow officers to check on fishing, boat licensing, and equipment violations.

There are 589 WDFW controlled waterway access areas. Officers suggest that a minimum of two to three one hour (including travel time) patrols per WDFW water access point per week are required.

While needed year round, land patrols are particularly in demand during traditional hunting times, mid-September through March/April:

“Seasonal work load is high. There are times when I have more information about illegal activity than I can work. The other officers in my detachment feel the same. A fair amount of illegal hunting activity is being under addressed. We have time to do surveillance one or two times and then we are on to the next series of complaints.”

Land patrols are driven largely by size and use of a resource. Sheer acreage is probably the dominant factor with the amount of hunting/trapping/ fishing being another important risk factor. Agency administrated lands, contracted areas, and state wildlife areas require more attention than private lands.



Fishing regulation is an important workload component. Land patrols check anglers along shorelines and on docks. Checking a catch as anglers disembark or while they load at boat ramps is frequent. Along the coastlines, fishing (including shellfishing) demands more attention than hunting. Officers conduct compliance checks on the status of shellfish in local markets, check origins of seafood at wholesaler premises and check the sale of salmon along roadsides. While on patrol, officers check work being done along the shoreline to ensure that it is in compliance with state law and regulation (Hydraulic Permit Checks).

In interviews and focus groups, officers did note that regulation activities were often neglected due to the press of other duties. EARS data appears to substantiate this, with regulatory activity (excluding HPAs) accounting for only 1,351.5 hours, 1.4% of enforcement activities.

With limited staff, scheduling is a challenge. Hunting is essentially a daylight activity, starting early and frequently ending at dusk. Most activity occurs during the day. Jack-lighting, dumping, resource theft, poaching, illegal trapping occur at night. In most areas these activities are not consistent enough to justify full time night patrol. Night time patrols limit day time patrols which often involve more pressing and immediate demands.

WDFW allows latitude in scheduling. When officers set their own patrol times, there are periods when officers are not available to respond to citizen-based calls for service. Frequently officers may be called out or the citizen call may have to wait until the following day. Staffing limitations make round the clock staffing impossible.

In field discussions, focus groups, and questionnaires, the number one concern of officers is decreasing time available for patrol. Later analysis will show that there has been a decline over the years in time available for patrol.

Officer notation of declines in available patrol time is of special concern. Patrol is a core activity of policing often first to suffer when workloads are too high. Since patrol can be delayed or put off for another day, patrol tends to be reduced significantly when workload increases. This fact has been long recognized by law enforcement experts. Key methodologies to determine when additional officers are needed are generally premised on amount of time officers have available for patrol (Fritsch et al., 2009). Declining time for patrol is a key indicator of staffing shortfalls.

As a proportion of total workload, patrol stands at 40.9%. Based on previous land management law enforcement studies conducted by IACP, patrol consumes approximately 50% to 60% of officer work effort, as a proportion of workload.

As available time shrinks, the more difficult and more time consuming patrols tend to suffer the most significant reduction. Off-road patrols are generally the first to reduce, especially those that require several hours. Officers note that high meadow and mountain patrols, wilderness patrols have reduced to one or two a season, a level they argue threatens public safety and deterrence.

Boat patrols tend to decline. Boat patrols frequently require multiple officers, take considerable time to launch and require clean up. Faced with competing demands vessel patrols have been significantly reduced. Night patrols, when poaching frequently occurs, are almost nonexistent.

Officer comments:

“Alpine patrols for the protection of mountain goats do not exist. There is no staffing for that activity” (FG2)

“Remote areas are becoming dangerous and suffering damage because of a lack of enforcement patrols.” (Q11)

“Poaching has increased. Compliance with all laws and regulations is down because of the lack of patrols.” (Q15)

“Preventive patrols, proactive work all gone in the rush to get immediate requests handled. Patrol is not being done in general, marine even more specifically.” (Q45)

“Back country patrols have been totally neglected...” (Q23)

“Night patrols have suffered.” (Q32)

“As a result of other demands and unavailability of staff they have been unable to patrol the eastside of the Cascade Crest trail for quite awhile. The mountain lakes and wilderness area are open to poachers and illegal activity.” (Q27)

**Boat Patrols.** In 2007, WDFW officers conducted 2,311.5 hours of vessel patrol. These addressed an overall coastline of 157 miles and a detailed coastline, including all bays and islands, of 3,026 miles and 8,000 lakes and ponds. The largest indentation in the coast is the Puget Sound, which is connected with the Pacific Ocean by the Strait of Juan de Fuca. More than 300 islands, including San Juan, and a number of rocky protuberances populate the sound. Other major bays are Willapa and Grays Harbor. The state has jurisdiction over 1,553 square miles of inland waters and 2,537 square miles of coastal waters. The Joint Enforcement Agreement with the Federal

Government provides jurisdiction over federal coastal waters.

There are over 8,000 lakes and ponds. Rivers and streams are numerous, the most prominent being the Columbia River. WDFW officers are also responsible for the patrol and protection of 2,537 square miles of offshore waters. Boaters use the marine and inland waters heavily. Over a quarter million (270,789) Washington-registered vessels ply these waters.

Fishing is a major commercial and recreational activity in the state, with 663,003 fishing licenses issued. Washington is the second largest seafood producer in the United States outside of Alaska. Washington fishermen catch more than 60% of the edible seafood harvested in the United States.

The fishing industry is of considerable importance, especially to western Washington. The state is among the leaders in the nation in production of salmon. Total value of its fish catch was \$163 million in 2004. Fishing crews operate on the lower reaches of the Columbia River, the waters of Puget Sound, the coastal waters off the Olympic Peninsula, and as far away as Bristol Bay in Alaska. The chief species caught are salmon, albacore, herring, rockfish, cod, flounder, Dungeness crabs, and ocean perch.

It is not surprising in this context that the majority of water patrol hours are directed to marine activity. Fresh water boat patrols occur mainly on the Columbia River. While there are some lake and stream patrols, these are not common, and have been reduced in recent years due to competing demands. Boat patrols commonly involve the near shore. Offshore patrols require very different deployment and equipment. This section focuses on near shore patrols. Offshore staffing and deployment will be treated in a later section of this report.

Water patrols address multiple missions, a spectrum of enforcement from resource protection (fish, shellfish, and crab regulations), to regulatory enforcement (recreational license, commercial license, and operator license checks), to boater safety (safety gear, skiing safety, and rider positioning), to unsafe boating (improperly equipped vessels, boating under the influence of alcohol or drugs), and other violation of fishing regulations.

The vast majority of recreational fishing remains adjacent to or within short distances of the coasts, in the bays and along the Puget Sound. Marine patrols are generally conducted in these areas. Vessel concentrations vary. They are particularly high in Puget Sound, Willapa Bay, Grays Harbor, and the Columbia River. Concentrations are seasonal. Boating increases in the spring, peaks during summer months, and declines during the winter months. Recreational fishing is highest on weekends.

The focus of water patrol varies by season, often attuned to the specific seasonal runs of fish or shellfish. At other times of the year, patrols may be directed to removing derelict fishing equipment (nets, traps). Most marine patrols are confined to daytime hours. However, officers note that night patrols are needed to fully enforce fishing regulations.

Concern was expressed by officers. "Especially neglected are late patrols and weekend patrols." Illegal netting and other resource exploitation frequently occurs during late night and early morning hours.

Shellfish harvest area patrol is a priority. Patrols of harvest area are necessitated by Food and Drug Administration (FDA) national marketing requirements. There are a number of shellfish areas along Washington's coastline, which require patrols. Officers monitor shellfish harvest, and compliance with regulations governing open and closed harvest areas.

Water patrol requires far more preparation and maintenance than land-based activities. Discussion with officers reveals that to bring a vessel to a launching spot requires from a few minutes to an hour. Launching and associated preparations take time. The average time spent traveling and preparing can reach two hours. Travel time on the water to get to a fishing area, a shellfish area, or an area to look for derelict equipment, varies. At the end of a water patrol, particularly marine patrols, a vessel must be washed and equipment stowed.

Water patrols are increasingly important. With decreasing fish stocks, prices have increased make the remaining resource more valuable and more attractive to illegal harvesting. State and Federal authorities have responded to declining fish stocks with greater restrictions and more limited seasons. For example, there has been a major expansion in areas designated by "North of Falcon." In 1999, four areas were identified with limited fishing to protect species. There are now 12 areas so designated, a threefold increase in areas to be patrolled. Without enforcement, restrictions and seasons are meaningless to many.

The Boldt Decision (Court) further complicated the situation by establishing the rights of native peoples to a portion of the resource. With three often competing groups, recreational, commercial, and tribal fisherman, different seasons and rules have been established for each, technically requiring far more patrols to ensure compliance with the increasingly stringent regulations. Without additional staffing, patrols have occurred less frequently than they should. "We have not been out enforcing the law because we don't have the staff and there are ever increasing taking of fish over limit and illegally."

A similar situation is evolving with shellfish along the immediate coast. In the Puget Sound crab and shellfish stocks are under pressure from overharvesting. A court decision (Rafeedie) now provides special rights to Native Americans relative to shellfish. This adds another level of complexity for WDFW enforcement of shellfish regulations.

Shellfish area patrols are also prompted by public safety concerns. Shellfish beds can experience some contamination during certain periods of the year. Harvested shellfish from these beds can be a health hazard. Beds closed because of contamination concerns must be patrolled routinely to ensure that shellfish are not illegally harvested from these areas. United States Department of Agriculture (USDA) requires that law enforcement patrols be conducted to ensure that Washington State shellfish are safe to be sold out of state.

Logs are kept on directed patrols through after action and weekly reports. (A directed patrol is one that is prompted by a request from a supervisor or administrator.) Interviews and discussions with officers suggest about one-third of patrols are linked to agency request of officers. Officers note that their decisions as to when and where to patrol was a function often of the time of the year, problems encounter, or based on information received.

## **SECTION 2: WORK PATTERNS - CALLS FOR SERVICE**

Answering calls for service have not traditionally been a large part of resource policing. However, with the growing population, and the increase in human-animal contact, WDFW officers are increasingly called to dangerous, nuisance, and injured animal complaints. Every officer interviewed spoke of the increasing proportion of their workload that address nuisance animal calls. WDFW officers are even called to problems with domestic livestock.

Most commonly calls for service are generated by citizen requests to respond to either a law enforcement or wildlife issue or to report a violation. The EARS Manual identifies a call for service as: "Time spent performing patrol for Fish and Wildlife and other violations that were initiated by a complaint given to the officer by a supervisor, by the public or by another agency."

Calls for service come from three sources: dispatched by the Washington State Patrol; forwarded to officers on their cell phones from the front desk in Headquarters; and directly from citizens to officer cell phones. As many calls come to officers from the front desk at Headquarters (WildComm) as from Washington State Patrol.

WDFW officers do not use dispatch in the traditional fashion. They do not call in and out of service and do not record their other activities on CAD. Washington State Patrol Dispatch tracks only calls sent to officers. The CAD also does not record the time spent on each call, only time call is received and call type. Officers record daily their calls for service in their EARS report. EARS does include the amount of time spent on each call for service.

Officers were queried about the source of calls. Officers in focus groups and interviews noted that only about 30% of calls for service originate with State Patrol Dispatch. Officers noted they receive calls from a number of sources:

- ❑ County Sheriff Dispatch: Many officers have a separate radio in their vehicle that is connected to the Sheriff's Office (SO). They frequently have their own call for that dispatch.
- ❑ County SO Deputies: A SO deputy (and to some degree the dispatch center) calls an officer directly by cell phone to advise of a CFS need. Many times that officer will then conduct a further investigation by phone to determine the need for a personal response.
- ❑ State Patrol Officers: Officer calls directly from the SP officers on scene, via cell phone. As with the SO, they conduct a series of phone calls to determine the need for a personal response.
- ❑ Email: Calls can also originate from email (using the Outlook function on the laptop).
- ❑ WildComm: The agency front desk area in Headquarters frequently contacts an officer to handle a complaint. This can take the form of an instant message or email message.
- ❑ City Police: Occasionally WDFW officers receive a phone call directly from a city police officer via cell phone or relayed via SO dispatch. This usually involves dangerous or nuisance wildlife. In most cases the officer is on the scene with the problem and if the animal is dangerous and still there, he responds. Otherwise, he generally follows up on an event.
- ❑ Other: CFS are received directly by officers on their cell or home phone by a variety of other sources, such as media, other agency PIOs, interested stakeholders, and finally, the citizen themselves. Citizens generally contact an officer if they know them personally and have access to their cell phone number.

Generally, the direct phone call or the email is not logged. Other than the immediate message, there is probably no computer driven record. Officers do record calls for service when they finish their tour of duty on the EARS system.

Calls for service most commonly addressed by WDFW officers include:

- Dangerous wildlife with imminent public danger (cougar, bear, moose, elk, coyote, deer)
- Big game (spotlighting, closed season, exceed limit, unlawful use of dogs)
- Threatened or endangered species (taking or harassment)
- Commercial fishing or sanitary shellfish (unlawful netting)
- Trafficking in fish and wildlife (unlawful buying or selling)
- Hydraulics (unlawful construction work within state waters)
- Emergencies involving fish or wildlife, or WDFW personnel, facilities, or property
- Hunting accident scene (whether or not investigated by another agency)
- Other WDFW, police, or government agency requests for immediate assistance
- Complaints of serious new deer or elk damage to commercial crops
- Dangerous wildlife reports (sightings, or pet or livestock killed and no predator)
- Injured wildlife
- Other WDFW, police, or government non-emergency assistance requests
- Complaints of ongoing deer or elk damage to commercial crops
- Escaped deleterious wildlife
- Nuisance or problem wildlife (beavers, coyotes, skunks, raccoons, birds, and deer)
- Regulation or enforcement questions
- Other fish and wildlife violations

Source: WDFW Policy Manual, Calls for Service

From January through December 2007, 7,897 calls for service were directed to WDFW officers by the Washington State Patrol Dispatch. Number of calls varied by significantly by region.

□	Region 1	967
□	Region 2	635
□	Region 3	549
□	Region 4	2,479
□	Region 5	1,119
□	Region 6	2,148
	<b>Total</b>	<b>7,897</b>

Calls for service are generally higher in urbanized areas (King County - Region 4) and Region 6. This is not surprising since the vast majority of calls for service dispatched by State Patrol involve either dangerous or nuisance animal complaints. In the urbanized areas animal/human interactions are more likely to occur.

In Table 3 a count is provided of calls for service by type. While there are a small number of calls for service that are of a traditional law enforcement nature, the vast majority of calls from State Patrol Dispatch are directly linked to Fish and Wildlife violations or concerns.

Interviews with officers, focus groups, and field observation suggest an average of 1.5 hours to 2.0 hours spent on each call for each call for service. This estimate includes travel time, time spent on the incident, and report writing time. Taking the conservative estimate of 1.5 hours and multiplying that by the 4,576 calls for service logged by State Patrol Dispatch, an estimate of 6,850.5 hours of time was spent during 2007 to respond to CAD directed calls for service.

A sizeable proportion of calls are not answered immediately. Some may be answered the following day when an officer comes on duty. Most that are not answered are due to the unavailability of officers. In 2007, 3,321 of a total of 7,897 calls (42.1%) were not answered by WDFW officers.

EARS records time spent on calls for service. Under enforcement/calls for service, EARS documents calls which are largely involved with public safety matters, a drunk driver, drinking at boat access areas, trespass, traffic concerns and other traditional public safety matters. It also records under Wildlife Control, calls concerning nuisance, dangerous, and injured wildlife. For 2007, EARS recorded 1,635.7 hours of public safety related calls, 9,984.9 hours of calls related to wildlife matters. Another 2,737.6 hours of time spent on calls involving completing case reports. It is estimated that in 2007 WDFW officers spent 14,358.2 hours on calls for service.



<b>Table 3</b>	
<b>2007 CALLS FORWARDED FROM WASHINGTON STATE PATROL (CALLS FOR SERVICE - BY TYPE)</b>	
<b>Type</b>	<b>Number of Calls</b>
<input type="checkbox"/> Abandoned Vehicle	20
<input type="checkbox"/> ABDBLK - Abandoned Vehicle Blocking	3
<input type="checkbox"/> AGGRES - Aggressively Driven Vehicle	6
<input type="checkbox"/> Alarm	13
<input type="checkbox"/> CIR - Citizen Incident Report	9
<input type="checkbox"/> COLPD - Non-Injury Collision	37
<input type="checkbox"/> COLUNK - Injury Unknown Collision	3
<input type="checkbox"/> COP	1
<input type="checkbox"/> DAV - Disabled Vehicle	43
<input type="checkbox"/> DAVBLK - Disabled Vehicle Blocking	22
<input type="checkbox"/> DAVFIR - Vehicle Fire	3
<input type="checkbox"/> DAVTOW - Disabled Vehicle with Tow Enroute	7
<input type="checkbox"/> ERD	104
<input type="checkbox"/> FAW - Fish and Wildlife	6,815
<input type="checkbox"/> FAWCOU - Fish and Wildlife Cougar Calls	252
<input type="checkbox"/> FIRE - Some Type of Fire	6
<input type="checkbox"/> INC - Incident	34
<input type="checkbox"/> Med	10
<input type="checkbox"/> Nar	3
<input type="checkbox"/> PED - Pedestrian	22
<input type="checkbox"/> PEDWAR	3
<input type="checkbox"/> PHOMSG - Phone Message	324
<input type="checkbox"/> ROB	3
<input type="checkbox"/> ROCK - Rock Thrown at Vehicles	2
<input type="checkbox"/> Stolen	2
<input type="checkbox"/> Theft	9
<input type="checkbox"/> TRF - Traffic Complaint	97
<input type="checkbox"/> TRFBLK - Traffic Complaint Blocking	84
<input type="checkbox"/> WANTED - Wanted Person	2
<input type="checkbox"/> Weapon	1

We estimate that 6,850.5 hours of the total calls for service come from the CAD. It appears, as officers suggest, that somewhere between a third and half of calls for service originate with the State Patrol CAD. We do not know how many calls for service are not being addressed that originate from the State Patrol CAD. We do not know how many calls for service from the other sources are not being addressed. It is probable that a similar proportion of calls that originate from sources other than the CAD are not being addressed due to lack of availability of staff.

Interviews, observations, questionnaires, and focus groups, all indicate that calls for service are not only increasing, but an increasing proportion are not being answered due to several factors:

- ❑ No officers on duty within a reasonable response time. Officers are generally not on duty during night time hours, with limited staffing not all days of the week can be covered in all regions.
- ❑ Officers have been detailed to other areas for special events or hunting season.
- ❑ Competing workload.
- ❑ Long response times minimize or preclude successful intervention given the transient nature of situations.

Review of CAD and calls for service data, informed by questionnaire responses and filed observation, indicate:

- ❑ A sizeable proportion of calls for service are not being answered in certain areas. This suggests that staffing is not sufficient, deployment disparities exist, or both.
- ❑ If calls for service continue to increase as a proportion of workload, round-the-clock staffing may be required.
- ❑ Calls for service are most commonly directed to dangerous and nuisance wildlife than hunting, fishing, or environmental issues.
- ❑ Calls for service take more time than officer initiated calls due to travel time.

### **SECTION 3: WORK PATTERNS - SECURITY**

Officers are not assigned frequently to check facilities, provide security at events (Gorge), disasters, or guard individuals/groups/sites. More frequently officers are assigned to checkpoints - a security-related function. During hunting season, checkpoints are staffed to monitor illegal takes and ensure that takes are properly tagged.

Recently, check points were established with some frequency to monitor for invasive species. The department now has an invasive species coordinator and particular efforts have been recently undertaken to stop the spread of the quagga and zebra mussel. Checkpoints have been established at fishing tournaments and at entry to the state to monitor vessels for evidence of zebra and quagga mussels.

WDFW officers, mainly in Region 6, are called upon to monitor pheasant release sites. In these cases, the WDFW officer is there to forestall arguments between hunters over downed birds. WDFW officers are also called upon to provide security during the suppression of wildfires.

Security assignments are not frequent or a key responsibility of WDFW officers. It is anticipated that as the homeland security and disaster response responsibilities of the state grow, WDFW officers will be increasingly called upon for intermittent security duties. With the growing popularity of wilderness camping and hiking, WDFW officers will increasingly be asked to secure facilities and monitor campsites.

### **SECTION 4: WORK PATTERNS - INVESTIGATIONS**

Investigation of an incident or information suggestive of wrongdoing is termed an investigation for purposes of this job analysis. WDFW EARS Manual identifies investigation as "Time spent performing follow-up of Fish and Wildlife and other violations."

All officers report conducting investigations, generally as follow ups to calls for service or self-initiated incidents. Investigations involved 16.6% of enforcement work, and 9.7% of total officer activities. In 2007, officers engaged in 23,844.2 hours of investigations. WDFW officers are more active in investigations than municipal counterparts.

Officers typically follow up their own cases. More complex, multiple site, and long term investigations are difficult and generally not conducted by officers due to competing demands and lack of additional resources. Complex, large-scale

investigations are conducted by full-time investigators sited in a special unit named SIU. The Special Investigations Unit (SIU) is small consisting of a lieutenant and five detectives. It is located on the west side of the state. Its location makes investigations in the eastern parts of the state difficult. Its small size limits the number of investigations that it can complete. This results in the majority of investigations either being inactivated or assigned to field officers. The SIU will be treated in a separate part of this report in more detail.

Officers and supervisors note that the number of investigations they conduct are far fewer than they would like. Officers are extremely limited by time and competition with other work. They argue that most complex offenses or offenses that require extensive time to investigate that cannot be addressed by SIU are essentially dropped.

Matters investigated range from traffic accidents to illegal taking of falcon chicks. Forest product thefts and hunting accidents are an important source of investigations. Poaching, illegal trapping, and use of illegal traps and nets for fish are also common. Investigations frequently result from patrols of regulated activities.

Job analysis findings which have implications for staffing and deployment are:

- ❑ In most agencies, detectives comprise approximately 10% of sworn officers. In WDFW, investigators comprise less than 4% of officers. This requires field officers to conduct investigations.
- ❑ The larger proportion of investigative and inspectional activity is conducted by regional and marine officers.
- ❑ Investigations and inspection activities engage WDFW officers far more than in traditional law enforcement agencies.
- ❑ Officer ability to conduct investigations is severely limited by competing duties and lack of resources.
- ❑ A sizeable proportion of investigations may not be followed up due to lack of time.

## **SECTION 5: WORK PATTERNS -ARRESTS AND COURT**

WDFW officers generally do not make the number of physical arrests that are made by municipal police. In fact, most violations are addressed by citations. In 2007, WDFW officers made 17,985 arrests. Most arrests involved the issuance of a citation. Physical

arrests while they do occur were far less common. Assuming that most citations and arrests are realized by field officers, this is an average of approximately 180 citations or arrests per officer in 2007. This is an average of approximately one citation per tour of duty.

Physical arrests take significantly more time than physical arrests by municipal agencies. A land-based arrest that occurs in a rural area requires travel to the nearest jail. Arrestees' vehicles require attention, which may involve either towing or securing, likely to take additional time. A second officer is almost always needed for most arrests. Marine arrests are even more time consuming. They involve securing an arrestee's vessel, either by finding an alternative driver, or a tow. The marine patrol vessel must also be secured, and the arrestee driven to a local jail, often requiring the assistance of an additional officer.

Officers recorded 1,735.3 court/hearings in 2007. This is about 15-20 hours per year spent in court or hearings.

#### **SECTION 6: WORK PATTERNS - CITIZEN AND AGENCY SERVICE**

Citizen services are an important part of workload. Most officers participate in Hunter Education classes and in the Eyes in the Woods program. Officers are frequent speakers before groups and in schools. On patrol, officers frequently stopped and talked to citizens and addressed citizen concerns. In 2007, 5,281 hours (2.1% of total work) was spent in public education endeavors. Officers assist in non-law enforcement programs. This support of other department initiatives involved 2165.5 hours or .8% of officer workload.

#### **SECTION 7: WORK PATTERNS - ADMINISTRATIVE ACTIVITIES**

Due to distance and decentralization administrative activities directed to coordination and control are more numerous than in traditional location limited organizations. With an estimated 25% of daily activities devoted to administration, it is important in planning workload that the amount of time required by administration be taken into account.

#### **SECTION 8: ADEQUACY OF CURRENT STAFFING LEVELS**

Understanding tasks officers undertake provides a base for a staffing and deployment study. However, knowledge of current work patterns, while suggestive, does not fully

consider the key question of whether current work being done by WDFW officers is sufficient to fully protect the fish, habitat, and wildlife resources of the State of Washington. Essential to determining staffing and deployment of officers then is the further question, *what tasks/needs critical to resource protection are not occurring or accomplished and how many additional officers are required to fill this gap.*

With one exception, officers, in questionnaire, focus groups, interviews, and ride-alongs note that numerous critical activities are not being done due to staff shortage. Neglect of these activities, place fish, wildlife and habitat resources in jeopardy. In no previous study have we found the degree of consensus that critical tasks were not being accomplished. More impressive is the near unanimous agreement on a specific and lengthy list of neglected activities.

Certainly, officer perception is not always reality. More objective measures than officer perception are needed to justify additional resources. Officers did, however, provide a listing of specific unmet needs upon which can be addressed by objective measures.

**Unmet Needs: Responding To Citizen Requests.** State population has increased by 20.1%, from an estimated 1993 population of 5,265,700 to a 2008 estimated population of 6,587,600. During this same period, commissioned law enforcement officers in WDFW enforcement program have declined by 28 officers, approximately 25%. Investigators have seen an even more substantial decrease, reducing from 17 to five. Since 1993, available officers have not only failed to match population increases, they have in fact declined. Per capita WDFW officers for Washington have declined since 1993 from 2.16 per 100,000 population to 1.39 per 100,000 population. With population rising and moving into previously wild areas, and with the growing imbalance between state population and officer availability, it is not surprising that a significant proportion of calls for service are going unanswered.

The most common concern voiced by officers involves the increasing number of requests for assistance from citizens regarding injured, nuisance and dangerous wildlife. These calls, frequently unanswered, are regarded as a hindrance to addressing what officers feel are more important activities.

Data supports contentions that wildlife calls are increasing. The data also support the fact that officers are not available to respond to a significant proportion of these calls. Over 40% of calls for service compiled in the State Patrol Computer Aided Dispatch System for WDFW officers are not directly answered due to the lack of immediate availability of officers.

Officers note and distribution of these calls supports the contention that increasing number of calls are largely triggered by population dynamics. Two interrelated factors

link to calls concerning injured, nuisance, and dangerous wildlife. Growing population and movement into what were previously wild lands has dramatically increased human/animal interactions.

Increases in calls for service is a key indicator of a need for additional officers in traditional municipal law enforcement. Methodologies have been developed to estimate staffing and deployment based on calls for service data. Due to data deficiencies this methodology cannot be used for WDFW. CAD information does not provide sufficient detail on response times and time spent on calls. There is considerable evidence that the CAD only provides partial data on calls for service.

CAD undercounts calls for service by what may be a significant margin. We don't know the extent of this undercount. What CAD does tell us is that 42.1% of calls for service are not immediately dispatched because there are no officers on duty to respond. Some of these calls may be addressed the following day or when an officer comes on duty. The majority of these calls are time limited. By the next tour of duty, the injured or offending animal is long gone.

EARS accounts for time expended for calls for service. Calls for service consumes approximately 14,358.2 hours of work. Knowing that approximately 42.9% of calls do not get immediate response and the average total for a call is about 1.5 hours, there is a need for an additional 4,981.5 hours of work to respond to CAD calls. This may account for only approximately half of the calls for service since many calls to officers do not originate from State Patrol CAD. If we were to utilize the traditional police staffing requirements methodology this calls for 17 officers.

**Unmet Needs: Declining Patrol Time.** Patrol is resource management's key strategy to protect and preserve fish, wildlife, and habitat. Over 80% of officers report that important patrols are not being accomplished due to staff limitations. Officers comment specifically on declining levels of officer initiated patrols.

In 2007, EARS reported 100,259.9 hours of patrol, 40.9% of total officer work activity. In resource law enforcement, patrols should consume a minimum of 50% of officer time, optimally 60%.

To bring the proportion of overall patrol hours to 50% requires 22,197 hours of additional patrol time. To increase patrol time to an optimum of 60% requires an additional 46,688.4 hours. To staff patrol so that officers have 50% time requires 24 additional officers. To staff at the optimum level of 60% requires 63 additional officers. Since the deployment of these officers are by county and region, to achieve the 50%-60% increase in proportion of patrol for each region may require slightly more officers. Increasing the proportion of time for patrol to 50% to 60% will increase needed patrols

significantly. At the same time, data suggest, while it will help, these increases will not be fully sufficient to address other key factors – calls for service, regulated activities, patrols of agency lands, and vessel patrols.

**Vessel Patrol.** Most commonly neglected is water patrol. Even inland officers note a lack of vessel patrol on lakes and rivers. A few of their comments are listed below:

- ❑ “Boat patrols –only two or three a year, more needed.”
- ❑ “... there is need for a patrol boat on the Columbia each day from the March through September. On any given day there may be dozens of sport fishing boat on the Columbia River in this detachment alone. At times when the salmon fisheries are active there are hundreds of sport fishing boats on the Columbia. Daily patrols are not happening.”
- ❑ “Needed and not being done are LAKE BOAT PATROLS (SPRING-SUMMER) and RIVER BOAT PATROLS (WINTER)”
- ❑ “We are not making an adequate presence at the 10 lakes in my area to enforce fishing and boating laws.”
- ❑ “Currently my officers have been unable to adequately fulfill their responsibility of conducting ocean patrols. Large areas of the ocean go without surface patrols because I simply do not have the available officers to conduct patrols.”
- ❑ “Only two officers can conduct a boat patrol two to three times a week. Our presence is not sufficient enough to deter unlawful activity especially when the fishermen are aware that there are very few officers not covering a majority of the days.”
- ❑ “Most of the time we have to pick one fishery to work and let the others fall off the table.”

Officer concerns appear to be supported by the data. In 2007, 2,311.5 hours of vessel patrol was recorded into EARS. With 1,553 square miles of inland waters, 3,026 miles of detailed coastline, 8,000 lakes and ponds, the extensive ocean area under JEA contract, and the many rivers, particularly the Columbia River, there can be little argument with the contention that current vessel patrols do not provide sufficient visibility for deterrence. Best estimate is that vessel patrols must be increased by a factor of two to three to reach deterrent thresholds.



**Regulatory Patrol.** Patrol of regulated activities ranks second as an area of concern for officers.

- ❑ “A sizeable proportion of wholesale markets, cold storage facilities, fish dealers, and commercial entities go almost completely unchecked”.
- ❑ “Game Farms- Pheasant – not checked in at least four years.”
- ❑ “Taxidermists within Kittitas and Yakima Counties – once in three years checked.”
- ❑ “Fur Buyers – never checked.”
- ❑ “Insufficient checks on hydraulic violations (habitat protection), fishing guides and charters, meat cutter and taxidermy inspections.”
- ❑ “aquatic invasive species patrols are not being conducted due to limited staff.”
- ❑ “Unlawful hydraulic activities have a huge impact on fish habitat yet I spend very little time working with our biologists on education or enforcement of this part of the law.”

The most common regulatory check is hydraulic permits, 5-7% of officer time. In 2007 officers conducted 627 hydraulic checks, which involved 3,117.9 hours of work. With the exception of hydraulic permits we were unable to obtain data on the number of regulated sites. Our review found that the number of checks by officers is low when contrasted with the number of issued permits, suggesting that hydraulic checks are an area that requires staff augmentation.

Other regulatory checks, we believe, are not receiving sufficient patrol. There is no data to verify need for additional officers. Hydraulic checks can and should be used as a multiplier to assess staffing and deployment needs.

**Land Patrols.** A number of officer concerns can be grouped under land patrol. Officers note an inability to conduct proactive patrols to deter or encounter law violations. Several types of land patrol are more likely to be neglected, especially those that demand a second officer (night time patrols). Back country patrols often demand a full day or more to complete and leave officers unavailable to break away and answer calls for service. Officers are unable to sufficiently patrol agency owned and administrative lands and Wildlife Areas (WLA).

Officers argue that off-road patrols, night time patrols are vital to protecting wildlife against poaching, protect endangered species, and ensure compliance with fishing and hunting regulations.

- ❑ “In recent years most notably is the sharp reduction of proactive big game and ESA patrols. These patrols are time consuming, but necessary in the prevention and detection of big game or other poaching activities.”
- ❑ “Backcountry/Wilderness patrols are neglected in my District. In the last 10 years, I believe I have only been able to pack into the Wenaha Wilderness two times. This area is very remote, yet receives activity from early summer to late fall. Streams in the area are very restrictive to protect ESA fish and most summer users are fishing to some degree. Fall use begins in September for archery seasons and run into November and sometimes December.”
- ❑ “High mountain patrols, including: High Buck seasons, Black bear seasons, high mountain lake fisheries, grouse, etc., are generally not conducted.”
- ❑ “Back country patrols. Yakima County has numerous outdoor hunting and fishing opportunities in the remote areas of the east slope of the Cascade Mountain Range. With minimal FTE levels, officers are unable to free up the calls for service enabling them time to be spent in these remote locations.”
- ❑ “Snowmobile Patrols - one or two a year, more needed.”
- ❑ “ORV Patrols - three or four a year, more needed.”
- ❑ “Patrols of Department Controlled Lands - we just skim the surface.”
- ❑ “Patrols of vast WLA lands for Green DOT road violations, land use violations, littering.”
- ❑ “Waptus Lake, 11 miles in, has resident Bull Trout and I have not checked it for fishing violations for five years.”
- ❑ “With all of the duties that need attention during the daylight hours, the officers just do not have time to work night patrols even in areas where known illegal activity is occurring.”

- “Have no time, no vision, and no direction on doing high mountain patrols, even though we have almost lost our entire mountain goat population in the last 15 years.”

Square mileage and the nature of the land patrolled are variables that have been related to staffing of resources offices. Methodologies for assessing officer staffing statewide based on area patrolled have been developed for State Police Agencies. IACP has modified this methodology and has provided staffing assessment based partially on land areas, and areas requiring special patrols. Chapter VI. will introduce land and special area patrol multipliers to identify more mission appropriate staffing levels for WDFW officers for land patrol. Methodologies developed for staffing state police will be adapted to this resource enforcement environment.

**Investigations.** Investigations account for about 16.6% of enforcement efforts, and 9.8% of overall officer workload (EARS). Investigations most commonly result from patrols. WDFW does not have regional detectives. Most investigations are addressed by regular officers. A small Special Investigations Unit, five detectives, addresses more complex and long term investigations.

Officers advise that their ability to conduct investigations is limited.

- “Complex or long term investigations such as residency issues, large big game cases, and follow up to complaints often are responded to in a timely manner, but then stretch on for months as reports and follow-up investigation fall victim to other activities. Other cases are never adequately addressed.”
- “I have a backlog of investigations that I have not been able to attend.”
- “I am unable to thoroughly investigate large-scale fish and wildlife crimes that involve a lot of time and legwork such as residency cases, serial poachers, and limited tip information.”
- “Cannot fully investigate poached animals when no suspect information is immediately available or known.”

The national norm is generally between 10-15% of sworn personnel assigned to investigations. WDFW has approximately 5% of its commissioned staff assigned to investigations. Recommendations to increase investigative capacity are made in the coming chapters.

**Public Relations:** While not high on the list of concerns, officers note that they do not have time to attend Hunter Education Classes and other public functions. Review of time spent in public relations, particularly hunter education classes, when contrasted with EARS data on public relations, supports their contention.

## **SECTION 9: SUMMARY OBSERVATIONS**

Important observations from this job task analysis that orient the remainder of this report are:

- ❑ Officers identify excessive and growing workload as a major problem for the organization. Current staffing is not sufficient to address the work that officers now confront. Officer observations are supported by data analysis.
- ❑ Workload can be divided into components to identify necessary staff to meet each type of work.
- ❑ The county/regional level makes sense as the base upon which to construct staffing and deployment requirements. This should enable officers to field the majority of their calls in their home counties.
- ❑ Land and marine based patrols pose very different challenges and draw work from very different sources. At their extremes, different scheduling and deployment may be required.
- ❑ Water resources may be protected by a vehicle patrols. Patrol along shorelines can identify problems and allow a view of boating and fishing. Fishing violations can be identified as vessels offload at shore. To a lesser extent land resources may be protected by vessel patrol. Vessel patrols may be the most efficient way to check land areas.

### **CHAPTER III. CURRENT STAFFING CONFIGURATIONS: ISSUES AND CONCERNS**

This section addresses:

- ❑ Current staffing of the Enforcement Program
- ❑ Factors Associated with Current Staffing
- ❑ Staffing and Deployment Issues

Our focus is primarily on commissioned staff: the chief of enforcement; deputy chief; captains; lieutenants; sergeants; detectives; and fish and wildlife officers 1, 2, and 3. All other staff are non-commissioned. The Enforcement Program has five components:

- ❑ Headquarters (Olympia)
- ❑ Commissioned field staff (deployed statewide)
- ❑ Hunter Education Division (Olympia)
- ❑ Aviation Section (Olympia Airport)
- ❑ Vehicle/Vessel Maintenance Shop (Olympia)

#### **SECTION 1: CURRENT STAFFING**

As of August 2008, the Enforcement Program reported an authorized staff of 161, 137 sworn. Due to budget limitations a number of positions remain unfilled.

Actual Sworn staff in August of 2008 numbered 137:

- |                |    |
|----------------|----|
| ❑ Chief        | 1  |
| ❑ Deputy Chief | 1  |
| ❑ Captain      | 7  |
| ❑ Lieutenant   | 5  |
| ❑ Sergeant     | 22 |
| ❑ Detective    | 5  |
| ❑ Officer      | 96 |

**Command Structure.** A chief commands the WDFW Enforcement Program from headquarters in Olympia. The deputy chief reports to the chief and assumes the chief's duties in his absence. The deputy chief supervises the captains and the Special

Investigative Unit Lieutenant. The Deputy Chief oversees the Internal Affairs process, focuses on liaison with other law enforcement agencies and regional directors, coordinates with other department programs, and supervises Headquarters staff and field enforcement operations. The Training Lieutenant, the Communications Lieutenant, and the Logistics Lieutenant report to the Chief.

Field staff, in 2007, were divided into six regions and a Marine Division, each commanded by a captain. Early in 2008, the Marine Division was reorganized and the staff and functions transferred to the coastal regions. The marine captain was promoted to deputy chief and the marine captain's position left vacant.

Regional captains report to the deputy chief and command a specific region. Captains generally supervise three to six sergeants and are responsible for maintaining professional and community contacts with local courts, prosecutors, tribes, other law enforcement agencies, community leaders, civic groups, state and federal agencies, and WDFW staff. Captains work from a regional office, supervise all enforcement activities, address problem wildlife responses, and manage operational budgets for their region.

The regions and the marine division are further broken down administratively into 21 detachments. Each detachment, supervised by a sergeant, generally works with a multicounty segment of a region. Sergeants report to the regional captain, supervise between three and seven officers within a specified geographical area, and frequently accompany officers on assignments.

Lieutenants direct administrative and support units:

- **Logistics Lieutenant:** Reports to the deputy chief and is responsible for Emergency Management; Evidence; Logistics; Supply; the Aviation Section; Vehicle/Vessel Maintenance Shop; serves as a liaison to other organizations for the exchange of terrorism information.
- **Training Lieutenant:** Reports to the deputy chief and is responsible for managing FWO recruiting, testing, hiring, certification, and training; maintaining training records; overseeing the Hunter Education Program; and processing license revocations and suspension orders. Also coordinates headquarters and regional outreach, education, and media issues.
- **Communications Lieutenant:** Advisor on radio communications technology and reports to the deputy chief. Coordinates agency radio administration, acquisition, updates, and maintenance; trains agency staff on new radio equipment and procedures; serves as Department/Program

liaison to other agency communications centers; is the Program's technology lead and supervises the Communications Division dispatch staff.

- **Marine Lieutenant:** Reports to the deputy chief. Operates and maintains ocean-going vessels under marine command; serves as the vessel fleet manager; responsible for the maintenance, inspections, modifications, restorations, tracking, acquisition, and transfers of all Program vessels; works with the Office of State Procurement, Business Services, and Financial Services to resolve vessel related issues.
  
- **Statewide Investigative Unit (SIU) Lieutenant:** Reports to the deputy chief. The SIU Lieutenant supervises five detectives; oversees, plans, facilitates, and directs SIU detectives to act both overtly and covertly to investigate significant natural resource law violations; reviews all potential field cases referred to SIU.

**Detectives and Wildlife Officers.** Five detectives are assigned to the Special Investigative Unit (SIU). Detectives report to the SIU Lieutenant. Their office is located on the Westside of the State. Detectives frequently work from their homes or are in the field, statewide. Detectives conduct overt and covert investigations of major violations of state, federal, and tribal fish, wildlife, environmental, and related laws and regulations. Detectives may conduct background checks and other investigations as assigned.

Fish and Wildlife Officers report to a detachment sergeant and normally work from their detachment offices or in the field. FWOs enforce and investigate violations of fish, wildlife, and environmental laws and regulations; provide advice; resolve dangerous and problem wildlife situations; assist other law enforcement agencies; respond to crimes in progress; respond to public safety emergencies; investigate hunting accidents; and are involved in community relations and educational activities.

**Civilian Staff.** This report does not directly analyze the civilian support staff. This review is undertaken to understand support available to commissioned staff. Civilian staff at Headquarters includes:

- **Criminal Justice Liaison and Administrative Regulations Coordinator (CJL/ARC):** Reports to the chief and assists officers and prosecutors with case preparation and presentation; provides instruction on fish and wildlife laws, search and seizure developments, and other legal issues to prosecutors at scheduled events and to officers at in-service trainings.

- **Research and Planning Manager:** Reports to the chief. Responsible for compliance with Commission on Accreditation for Law Enforcement Agencies (CALEA) standards; verifies that periodic reports, reviews, and other activities mandated by applicable standards are accomplished; participates in agency budget preparation and management; drafts and updates Program regulations; assists with strategic planning; updates and evaluates Program goals annually; creates the Program's annual report; serves as the research and planning function for the Program.
  
- **Problem Wildlife Coordinator:** Reports to the Communications Lieutenant. The PWC is the agency lead on all statewide problem wildlife issues, including policy/procedure development, budget development, tracking stakeholder involvement, providing strategic planning, and recommending future direction for the Problem Wildlife Section
  
- **Data Management Analyst:** Reports to the Accreditation Manager. Responsible for monitoring Joint Enforcement Agreements; assisting the Special Investigative Unit with data collection, preparing data analysis reports, tracking vessel use, and conducting various other projects.
  
- **Information Technology Systems Specialist:** Is the Program lead on microcomputer support issues, including software acquisition, delivery, setup, installation, maintenance, troubleshooting, and repair; leads the acquisition, installation, and programming of mobile computers for patrol vehicles.
  
- **Administrative Assistant to the Chief (AA4):** Reports to the chief. Acts as the Command Staff Executive Secretary; supervises the Administrative Assistant 3; is responsible for all Headquarters office operations, including safety, security, supplies and equipment, rosters, communications, mail, forms, records, and information management; serves as a liaison to Human Resources on all personnel actions, including hiring, promotions, transfers, and discipline.
  
- **Administrative Assistant 3 (AA3):** Reports to the Administrative Assistant to the Chief. Responsible for department license-suspension and revocation processing and secretarial support to the staff.
  
- **Program Supply Specialist:** Reports to the Logistics Lieutenant. Responsible for purchasing, storing, and distributing supplies and equipment to the Officers in the field.



- ❑ **Customer Service Specialists:** Report to the Communications Lieutenant and are primarily responsible for handling initial citizen contacts with the Program by providing advice, information, and referrals in person, by telephone, or by e-mail; respond to Emergency Incident Hotline calls; dispatch officers; process permits and Problem Wildlife Field Reports.
- ❑ **Supervisor Hunter Education:** Reports to the Training Lieutenant. Supervises Division staff; develops training policies and materials; executes the Division budget; administers the statewide Hunter Education Program.
- ❑ **Secretary Hunter Education:** Maintains hunter education databases and files; monitors the Division budget; prepares correspondence; serves as the initial public contact for the Division.
- ❑ **Conservation Education Specialists:** Two full-time Specialist positions and one part-time Specialist position. One is full-time in Olympia for Western Washington and one is full-time in Ephrata for Eastern Washington. The part-time Specialist conducts special projects assigned by the Hunter Education Division Supervisor. The Conservation Education Specialists train and support hunter education instructors in the regions.
- ❑ **Pilots:** Two pilots are assigned to the Aviation Section. They operate and maintain agency's aircraft. They report to the logistics lieutenant.
- ❑ **Equipment Mechanics:** Two mechanics repair and install equipment on agency vehicles and vessels. They report to the logistics lieutenant.
- ❑ **Evidence Technicians:** Two evidence technicians, one on the east side and one on the west side are responsible for the processing, storage, and retrieval of agency evidence. Other administrative duties are also assigned.

## **SECTION 2: SHIFT SCHEDULES**

The field officers work 171 hours during a 28 day cycle. Officers and supervisors have considerable flexibility in specific days worked, the number of hours worked during a workday, and time of day worked.

Monthly schedules are determined in a 28 day detachment meeting. The detachment identifies and prioritizes work to determine methods, times, locations, and days off. Based on enforcement needs, each supervisor has authority to make final decisions regarding schedule and the time, place and methods of work to be performed. Supervisors attempt to meet officers' personal needs. A 28 day detachment or unit plan is forwarded to the Regional Captain for approval.

At the meeting officers request days off as Preferred Days Off (PDO) or Regular Days Off (RDO). Supervisors may deny requests to schedule patrol priorities. When supervisors approve requests for PDOs, they may cancel within 72 hours notice without incurring callback pay. If a PDO is cancelled with less than 72 hours notice, the department will compensate an officer.

Officers are normally scheduled to work at least two weekends each work period. Non-weekend days off are to be consecutive unless otherwise selected by officers. Officers who do not participate in the planning process may have their days off unilaterally set by their supervisor.

A number of schedules were reviewed, from the different detachments. Most followed fairly traditional scheduling practice with five, eight-to-nine hour days followed by two regular days off. Days off are staggered, so regional officers are on duty most days of the week. Officers are permitted to incur overtime for bona fide emergencies, if they cannot contact their supervisors.

This schedule permits considerable flexibility in assignment of officers to coincide with hunting and fishing seasons, special investigations, night time and proactive patrols. This is an efficient schedule for Fish and Wildlife officers.

### **SECTION 3: JOB BIDDING AND DEPLOYMENT**

Officers with greater than three years service with WDFW may bid on department openings. Bidding is based on seniority. Officers that bid or are appointed to a position, once awarded that position, have a 90 calendar day period to establish a permanent residence within the geographical area defined for that position.

### **SECTION 4: AVAILABILITY**

Due to a variety of factors, including days off, vacation, sick leave and training, WDFW patrol officers are not always available to work. To calculate patrol staffing needs, deploy officers properly by time of day, day of week, and geographical area, and to

evaluate productivity, the actual amount of time an officer works (availability) must be calculated.

Officers work 171 hours per 28 day period, an average of 2,229.107 hours yearly. Leave and training time must be deducted to find final availability. In 2007, commissioned staff took an average of 70.32 hours holiday time, and 157.68 hours of leave. Training time involved an additional 149.25 hours in 2007. Subtracting leave time, holiday time, and training time provides a final availability of 1,851.86 hours for the year. Availability calculations are based on actual use of sick time, vacation or other leaves. Leave data, holiday leave, and training time come from EARS.

WDFW officer availability is higher than most law enforcement agencies. The administration and the men and women of the WDFW Enforcement Program should be complimented on their judicious use of sick time, vacation, and compensated time.

## **SECTION 5: REGIONAL PATROL**

**Regional Patrol.** The majority of officers are assigned to the patrol function – land or water. To organize patrol, regions are generally further subdivided into between two and four detachments. Detachments are commanded by a sergeant. There are six regions and a marine division. Regions vary in composition ranging from a five-county area (Region 2) to areas comprised of up to 10 counties (Region 1). The Marine Division during 2007 covered areas within regions along the coast. Approximately 89% of staff are assigned to the regional or marine division.

WDFW officers are assigned to a region and then to a detachment and a county in that region. There are 39 counties with no officers resident in four counties (Adams, Douglas, Jefferson, and San Juan Counties). The largest number of officers assigned per county was King with seven officers. Most counties had one or two officers assigned. The more populated and coastal counties tended to have more officers.

Marine officers in addition to being assigned to the Marine Division also receive regional and county designations. When their marine duties permit, marine officers conduct land patrols and function as regular regional officers.

Review of officer work logs and CAD revealed that the majority of work undertaken by officers occurs within the county of assignment. However, officers do respond to calls outside of their home counties and are frequently assigned to details in neighboring counties. With officer's "beats" identified as the county in which they live and with officers assigned a vehicle, officers are on duty as soon as they leave their residence. Officers must have a residence within the area to which they are assigned.

The regions are staffed as follows (8-14-2008):

**Region 1 Spokane**

- ❑ Captain
- ❑ Detachment 20 – Sergeant and 5 officers
- ❑ Detachment 21 – Sergeant and 5 officers
- ❑ Detachment 22 – Sergeant and 5 officers
- ❑ Regional total Captain, 3 sergeants and 15 officers

**Region 2 North Central**

- ❑ Captain
- ❑ Detachment 14 – Sergeant and 4 officers
- ❑ Detachment 15 – Sergeant and 3 officers
- ❑ Detachment 16 – Sergeant and 4 officers
- ❑ Regional total Captain, 3 sergeants and 11 officers

**Region 3 South Central**

- ❑ Captain
- ❑ Detachment 17 – Sergeant and 4 officers
- ❑ Detachment 18 – Sergeant and 4 officers
- ❑ Detachment 19 – Sergeant and 4 officers
- ❑ Regional total Captain, 3 sergeants, and 12 officers

**Region 4 Cascade**

- ❑ Captain
- ❑ Detachment 1 – Sergeant and 4 officers
- ❑ Detachment 10 – Sergeant and 7 officers
- ❑ Detachment 11 – Sergeant and 3 officers
- ❑ Detachment 12 – Sergeant and 5 officers
- ❑ Detachment 13 – Sergeant and 4 officers
- ❑ Regional total Captain, 5 Sergeants and 23 officers

**Region 5 Southwest**

- ❑ Captain
- ❑ Detachment 4 – Sergeant and 7 officers
- ❑ Detachment 5 – Sergeant and 6 officers
- ❑ Total Captain, 2 sergeants and 13 officers

**Region 6 Coastal**

- ❑ Captain
- ❑ Detachment 2 – Sergeant and 4 officers
- ❑ Detachment 3 – Sergeant and 4 officers

- ❑ Detachment 7 – Sergeant and 4 officers
- ❑ Detachment 8 – Sergeant and 4 officers
- ❑ Detachment 9 – Sergeant and 6 officers
- ❑ Total Captain, 5 sergeants and 22 officers

With the complexity of tasks, the number of different work tasks and different seasonal demands officers are frequently pulled to work specific areas generally to address hunting seasons or fish runs. Officers generally work within their region of assignment.

### **SECTION 6: SPECIAL INVESTIGATIONS UNIT**

WDFW has a small investigative unit titled Special Investigations Unit (SIU). WDFW's Enforcement Program has no investigators assigned to the regions. All investigators are assigned to SIU. SIU is comprised of a lieutenant and five detectives. This is down from 12 investigators five years ago and 17 investigators at the time of the founding of the organization in 1993.

This unit addresses more complex and important investigations. Most routine investigations are undertaken by field officers. The Lieutenant in SIU reports to the Deputy Chief at Headquarters. Detective positions are a competitive position. The Unit is based in Region 6, which includes Thurston, Pierce, Mason, Kitsap, Jefferson, Gray Harbor, and Clallam Counties.

The unit takes an all crimes approach to their investigations, which are covert and overt in nature. The first Organized Crime (RICO) case prosecuted in the State of Washington was a result of a Fish and Wildlife investigation on geoduck theft and export. Their case adoption is based on the complexity of the initial and potential investigation. The number of co-conspirators, size of loss, multi-state involvement or statewide implications are all reasons to adopt and move an investigation forward in SIU. Unit focus is on organized crime, high value enforcement. SIU interacts with the Joint Terrorism Task Force, the Field Intelligence Group (FIG/FBI) and the Washington Joint Analytical Center, but they have no active presence in any of these intelligence operations.

Complexity is the major criteria for case acceptance. Cases come to their attention two ways:

- ❑ Referred by patrol officers, or
- ❑ Stumble on via reading regional reports or discussions.

Since they are based out of western part of the state and most of their cases are fish or shellfish related due to location and value of the market.

The SIU lieutenant keeps an internal case management system that tracks the status of both open and closed cases. They do review all weekly reports from the Regions for possible case adoption, but they have no mechanism for case referral automatically when a field officer takes a report and believes SIU should follow up.

The agency computer forensics is the responsibility of one detective in SIU. Technology (cameras, sound, GPS tracking, etc.) is done by another detective and according to the supervisor these responsibilities take the detectives away most of the time, as their responsibility is statewide. "That leaves me with two to three investigators to actively do criminal investigations in the state."

SIU is responsible for and does all background investigations for the agency new hires. They also lose one of their detectives for a month every year for firearms training. WDFW's Enforcement Program has one of the smallest proportion of its staff assigned to its investigative unit. Most law enforcement agencies, including resource oriented enforcement programs assign between 10% and 15% of their sworn staff to full time investigations. Travel time and staff limitation results in most investigations being confined to the west side of the state.

Given the small size of the unit and their location, most WDFW investigations are conducted by field officers.

## **SECTION 7: AVIATION**

The Aviation Unit is currently staffed by two pilots, one of which is a full time pilot, the second pilot has maintenance responsibilities and is thus one half pilot and one half mechanic. Aviation also has additional on call pilots, who work when requested by the hour. Prior to 2003, pilots held dual function as Law Enforcement Officers and pilots; after 2003, to remain in Aviation, the pilots had to give up the law enforcement certifications.

The Aviation Unit is based in the western part of the state and most aviation activities are confined to the western areas of the state due to flight limitations above the mountains, which are situated between eastern and western parts of the state.

The current fleet includes two single engine Cessna, and one twin engine aircraft; there are no helicopters. One Cessna has float attachment capability and will be based near water for particular seasons

The budget for this unit is approximately \$250,000 per year with 20% from charge backs from other agency programs (\$200,000 state fund, \$50,000 charge back monies). Aviation does work with federal agencies and is paid a charge back.

Approximately 90% of missions are from other programs within the Department of Fish and Wildlife (fisheries, habitat, wildlife) and less than 10% of their aviation patrols devoted to law enforcement.

Examples of LE missions include:

- ❑ New officer orientation to patrol areas
- ❑ Spotting for investigations and enforcement
- ❑ Off shore fisheries patrol
- ❑ Visuals of hydraulics or habitat violations

Requests for enforcement assistance are informal and may come from an officer with supervisory review. There are usually only about one to two law enforcement flights per month. Workload data on unmet requests are not maintained so it is difficult to establish unmet workload.

Currently there is discussion on the consolidation of flight facility operations with State Patrol and the Department of Natural Resources. Other aviation related concerns revolve around the need for a helicopter particularly for wildlife, habitat, and fish programs, that could be used for darting activity. An additional on call pilot for the east side of the state would permit more aviation activity on the east side of the state.

Officers in interviews and focus group did note that they received relative little assistance from aviation. Marine officers, in particular, felt that additional air support could assist, particularly in monitoring commercial fisheries.

## **SECTION 8: FACTORS ASSOCIATED WITH CURRENT STAFFING PATTERNS**

In 1994, WDFW conducted a study of the deployment of its officers. This study “focused on methodologies that would develop a model for optimum deployment of existing officers.” While this study did not address what staffing levels should be for WDFW’s Enforcement Program, it did suggest, “An implicit assumption exists within the Washington Department of Fish and Wildlife, (WDFW) Enforcement Program that current officer staffing levels are generally inadequate.”

The 1994 study noted that historically the optimum deployment of fish and wildlife officers has relied on the “collective experiences and intuition of enforcement

administrators.” This was largely due to the fact that until recently most enforcement administrators simply did not have systematic data on officer productivity, workload, risk factors, crime loads, and varied statistics on harvest and demand. They further noted that in recent years quality information is increasingly available upon which to quantitatively base deployment decisions.

The 1994 study developed an exhaustive listing of work activities undertaken by officers, 37 work items. This listing of job tasks (with minor updating for recently added activities) has been used in our current study. The 1995 study noted that there are generally two elements in determining staffing and deployment:

- (1) establishing the proper deployment of existing officers and,
- (2) determining total optimum number of officers required to address workload.

The 1995 study focused on “determining the workload associated with a particular geographical area (county) and deploying current available workforce within those areas. It did not address optimum staffing levels for the Enforcement Program. It did, however, set the stage for a workforce study that would address optimum staffing levels.

The 1995 study used a model developed by Cowles (1982). The Cowles model was developed to properly staff and deploy wildlife officers. This approach first identifies the mission or goal (example: protection of the fish resource) then identifies the work that wildlife officers do to achieve that mission (example: patrol stream, rivers, marine areas, and lakes). The model then develops quantitative indices associated with the work (example: miles of streams that need to be patrolled). Finally, the Cowles Model then develops based on observation and interviews, a multiplier to relate the indices to the number of officers required (example: 2.5 officers per 300 miles of class one streams).

In other disciplines, for example, the security industry, this type of model is known as a risk model. Under risk model, one identifies the resource at risk (example: salmon stocks), then the risk is quantified by a risk factor (miles of salmon bearing streams and rivers) and then that risk factor is tied to an action multiplier that identifies staff needed to address the risk (number of officer patrols require per 100 miles of salmon bearing stream and river).

Whether termed the Cowles Model or a risk analysis, this approach as was pointed out in the 1995 study has some limitations:

- It assumes a linear relationship between indices and staffing needs



- ❑ It may not reflect future conditions
- ❑ It is deterministic where some variables are probable
- ❑ the weighting criteria and methodology may not be objective. (Cowles 1982)

While clearly these limitations must be considered, overall this modeling has been successfully utilized in a number of resource enforcement settings and has received good results.

The 1994 study analyzed the mission, the role, and the work done by WDFW officers. It then based on analysis of the work done by officers, developed quantifiable indices associated with that work (example: number of hunters, acreage of habitat, population of area). It also developed multipliers to link indices to counties and regions so as to deploy existing officers. What the 1994 study did not do is develop multipliers to identify optimum staffing levels to adequately protect the resources.

The 1994 study was a deployment study not a staffing study. In its efforts to properly deploy WDFW officers, it did identify work, key variables, and key indices associated with officer work. It provided a base for this staffing study to build upon. It calls for a further study, building on its methodology and findings to address the further question of how many WDFW officers are needed to adequately protect the state of Washington's fish and wildlife resources.

## **CHAPTER IV. INFORMATION RESOURCES**

This section of the report identifies and reviews information resources available to support staffing and deployment decision-making and

- ❑ Evaluates the potential contribution of each information resources for staffing and deployment.
- ❑ Identifies strengths and weaknesses of each resource
- ❑ Recommends changes in data collection or database architecture that could improve the usability of that information resource.

### **SECTION 1: INFORMATION SOURCES FOR STAFFING AND DEPLOYMENT ANALYSIS**

The following information resources were analyzed in developing this report:

- ❑ Calls-for-service/activity (Washington State Patrol CAD)
- ❑ Distribution of Work (EARS)
- ❑ Vessel Use Report
- ❑ Hunting Incidents Report
- ❑ Yearly Report
- ❑ Shellfish Zones
- ❑ County demographics (U.S. Census Bureau data, population, type (area))
- ❑ Hunting and Fishing Licenses (limited to place of purchase and type)
- ❑ Registered Watercraft
- ❑ HPA Permits
- ❑ Shoreline configurations and distances (includes coastal, river, lakes, bays)
- ❑ Selected comparative state's databases
- ❑ Various WDFW databases specific to unit operations (e.g. SIU, Aviation, Marine)

### **SECTION 2: COMPUTER AIDED DISPATCH (CAD)**

For most law enforcement agencies, CAD is a key database for measuring workload,

deployment of officers, and establishing manpower requirements. CAD does not provide these benefits for WDFW's Enforcement Program. There are five reasons for this.

First and most significant, calls for service are not a significant source of workload as in traditional municipal policing. Most threats to wildlife, habitat, and fish/shellfish resources are covert, and lack an active victim. Generally there is no victim to alert law enforcement and provide key information.

Second, the dispatch system is not conducive to CAD analyses. Officers do call in and out of service, however, they do not report most of their activities through CAD. Officers use a different system (EARS) to track work and time spent on duties. For WDFW WSP provides far less information than traditional systems.

Third, the WSP database provided to IACP has additional deficits. While providing a listing of calls for service and information on day, nature of call, time call was received, and location, the database does not provide information on how long an officer is on scene. One cannot calculate how much of an officer's time the call consumed - a key workload variable.

Fourth, not all calls for service go through the State Patrol CAD. More than a third of calls for service come to field officers from sources other than State Patrol Dispatch. Officers also receive calls for service from WILDCOM, from regional WDFW staff, from sheriff and municipal police dispatch centers, and from the officer's cell and home phones.

Fifth, the CAD does not provide information on calls to which officers are unable to respond. To determine optimum staffing it is important to identify work that cannot be done.

CAD identifies the responding unit when a call to WDFW is dispatched. In 3,321 of 7,897 calls logged (42.1%), no WDFW responding unit is identified. A few of the calls not responded to by WDFW are sent to local sheriff's departments (14). Many of the calls for which there is no response occur at night or when WDFW officers are not on duty or not scheduled for night patrols.

While some calls for which an officer was not available may be followed up the next day, the nature of these calls (wildlife complaints) suggests that by the time an officer gets the call the event is over.

While CAD information has limited utility, it does provide important insights into a specific workload (calls for service) that is an increasing and sometimes neglected source of work for WDFW.

Information from CAD that is important for staffing included:

- ❑ Calls by time of day suggest that in certain areas, evening patrols may be needed.
- ❑ Calls without responding officers suggest that as many as 42.1% of calls are not being answered.
- ❑ Calls vary dramatically in volume by county and region. This has important implications for deployment of officers.

CAD data can also be used to triangulate other data. In earlier analysis, CAD calls for service volumes were compared to similar data from EARS. The datasets complemented each other increasing trust in both sources of data.

There is much that could be done to improve the value of the CAD information system for WDFW. It is doubtful, given the nature of the work that WDFW does, and the diverse sources from which calls originate, that upgrading information on the State Patrol CAD is worth the cost and the effort.

What we do recommend is that some modifications be made to the EARS system to more specifically trace calls for service. We also recommended that all calls for service, that we not able to be followed up by officers be specifically noted by State Patrol CAD and that this information be forwarded weekly and monthly to WDFW for planning and deployment purposes.

### **SECTION 3: ENFORCEMENT ACTIVITY REPORTING SYSTEM (EARS)**

All commissioned officers provide daily work summaries to EARS. Each officer completes a form daily, identifying activities and time involved to complete these activities. Officers carry the report form with them and enters the information on work as it is completed, nature of the work, time spent on the specific task, location, contacts made during the task, mode of transport, and a number of other factors are recorded for each daily task. Recorded materials are entered into the EARS database through networked laptops.

EARS work tasks are broken into four major categories:

- ❑ Administration
- ❑ Enforcement
- ❑ Public Information
- ❑ Wildlife Control

Administration is subdivided into subcategories:

- ❑ **Administrative Reports** – Time spent completing reports not related to an enforcement activity includes EARS reports, total time, injury reports, and leave reports.
- ❑ **Maintenance** – Time spent related to maintenance of vehicles, vessels and equipment. This includes all related reports.
- ❑ **Attend Training** – Time related to training activities including authorized activities, such as LED, policy and procedures and other professional development materials. Also training conducted at 28-day meetings, if a report of training is completed.
- ❑ **Conduct Training** – Time spent training persons inside and outside the Department, includes time spent performing FTO while not in the field.
- ❑ **Meetings** – Any meeting including monthly 28-day detachment meetings.
- ❑ **Evidence** – Time spent completing required documentation related to evidence including auditing, evidence maintenance and disposal of evidence.
- ❑ **Management** – Time spent performing duties related to the management support of Enforcement Program activities. Captains and Lieutenants only.
- ❑ **Supervision** – Time spent by supervisors performing supervision, review and control activities over subordinate officers (except time in the field which recorded as Field Supervision) (EARS Manual, 2007).

Enforcement is defined as “activities related to enforcement of statutes and WACs,” the core mission of WDFW’s Enforcement Program. Enforcement is subdivided into:

- ❑ **Patrol** – Time spend performing officer initiated patrol for Fish and Wildlife. Supervisors use this code if performing duties in the field that are not Field Supervision. Time spent in planning and coordinating a patrol activity is recorded as Patrol Activities.
- ❑ **Call for Service** – Time spent performing patrol for Fish and Wildlife and other violations that were initiated by a complaint given to the officer by a supervisor, by the public or by another agency.
- ❑ **Investigation** – Time spend performing follow-up of Fish and Wildlife and other violations. This includes SIU investigations. All investigations require a case number.
- ❑ **Field Supervision** – Time spend by a supervisor in the field with a subordinate.
- ❑ **Case Reports** – Time spent completing arrest or supplemental reports related to patrol activities or calls for service.
- ❑ **Court** – Time spent at court and administrative hearings. This includes meeting with prosecutors and attorneys in preparation for trial.

EARS tracks officer involvement in public information, defined as “activities related to providing information to the public on fish and wildlife, enforcement, or public safety issues.” EARS subdivides public information activities into subcategories:

- ❑ **Stakeholder Group** – Hunting, fishing, or animal rights interest groups.
- ❑ **Fair** – state and county fairs.
- ❑ **School** – private and public schools or students.
- ❑ **Hunter Education** – related to the support of the Hunter Education Program.
- ❑ **Media** – Newspaper, television, or radio contacts.
- ❑ **Government Officials** – State and local appointed and elected officials (EARS Manual, 2007).

Support other programs captures activities that support the Department of Fish and Wildlife. Subcategories are:

- ❑ **Habitat** – Habitat issues, but not including HPA violations, hydraulics violations or enforcement checks on HPA projects.
- ❑ **Fish** – Such as surveys, test fisheries, and hatchery support.
- ❑ **Wildlife** – Such as surveys, feeding for population maintenance, season recommendations.
- ❑ **Licensing** - dealers checks, but not including enforcement actions on dealers.

Wildlife control involves “Activities related to damage or complaints concerning nuisance and damage by wildlife.” Wildlife control is subdivided into:

- ❑ **Dangerous Wildlife** – Activities related to any species when there is concern for public safety. This includes activities related to Public Safety Cougar Removal Permits that are not *Patrol Activities* and *Calls for Service*, such as boundary recommendations.
- ❑ **Nuisance Wildlife** – Activities related to nuisance activity by any species of wildlife.
- ❑ **Winter Feeding** – Feeding activities only related to damage prevention.
- ❑ **Deer/Elk Damage Claim** – Response to damage to agricultural or commercial property.
- ❑ **Deer/Elk Claims Damage** – Response and investigation when a claim has been filed. All claim require a case number.
- ❑ **Cooperative Fencing** – Time spent meeting with landowners and planning cooperative fencing agreements.
- ❑ **Permit Hunts** – Time spent planning and monitoring kill permits, preference permits, LO Access permits, Hot Spot hunts and depredation permits. Violations detected should be recorded as *Calls for Service*.
- ❑ **TLIP** – Trial Landowner Incentive Program - Time spent meeting with landowners and planning Trial Landowner Incentive Program agreements.

- **Injured Wildlife** – Response to reports of sick or injured wildlife (EARS Manual, 2007).

EARS provides sub detail for each subcategory. For example, for each of the enforcement subcategories more specific information is provided:

- Assist Other Agency (often the back up of another law enforcement agency)
- Forest Products (generally involves theft of)
- General Authority (enforcement of criminal laws)
- Off-Road Vehicle (Habitat protection of land from off-road vehicles)
- Traffic (control)
- Trespass (generally on restricted areas)
- Vehicle Accident
- Warrant Service

For each of the categories, subcategories, and details, the following data is collected by EARS:

- Hours worked (time involved in the specific activity).
- Informational contacts (citizens provided with information by an officer during an activity).
- Enforcement contacts (citizens checked as part of an enforcement activity)
- Violators (citizens who were in violation during an enforcement contact)
- Arrests (includes both physical arrests and citations). Arrests are further broken down into:
  - Infractions
  - Felonies
  - Misdemeanors
  - Gross misdemeanors



- ❑ Written Warnings
- ❑ Verbal Warnings
- ❑ Officer Assists
- ❑ HPA Checks
- ❑ Problem Wildlife
- ❑ Damage Claims
- ❑ Regulated Activity Check Reports
- ❑ Vessel Inspections

Information is also captured by EARS as to the officer's location and transportation (mode) for the activity. Information gathered includes:

- ❑ *Office* - While working at a state or other government office
- ❑ *Residence* - From the residence or home office or incidents while off duty
- ❑ *Vehicle* - From the officer's vehicle
- ❑ *Vessel* - While on vessel patrol
- ❑ *Aircraft* - While on aircraft patrol
- ❑ *ORV* - While on ORV patrol
- ❑ *Snowmobile* - While on snowmobile patrol
- ❑ *Mtn Bike* - While on bike patrol
- ❑ *Horse* - While on horse patrol
- ❑ *On Foot* - While on foot patrol
- ❑ *Diving* - While diving

Officers also provided information on leave, holiday time, and mode of patrol, including vessel use.

Analysis revealed that officers are faithful in reconciling daily time. Using availability data for each officer and multiplying availability by the number of commissioned

officers, and then contrasting that number with total activity hours reported by EARS, a close correspondence was found between the two numbers.

Categories in EARS are mutually exclusive. One can only enter an activity and its associated time into a single category, subcategory, and sub detail. If one adds up all entries by an officer, it will equal the total amount of time worked by that officer during the time period in question. There is considerable overlap and differences in interpretation regarding category entry. For example, most calls for service (as revealed from CAD data) from citizens involve animal complaints. However, calls for service that involve nuisance, injured, and dangerous animals would be listed under Wildlife Control.

Also, under enforcement, patrol (involving officer initiated activities) may have several goals, stopping and checking a WDFW water access point to make sure that individual fishers have licenses, and then on the same patrol checking a restricted area for off-road vehicles can lead to some overlap in how to assign the time. This is not a major problem.

Overall, EARS provides valuable insights into the workload of WDFW officers. It provides an overview of the work they do. It also can provide insights into what is not being done, highlighting the consequences of staffing limitations. EARS can be compiled to the regional, county, workgroup level, and individual officer level. It can provide an excellent synopsis of general categories of work for any officer, any group of officers, or areas of the state.

With some minor modifications EARS could be even more valuable. More detailed tracking of calls for service would provide the department with a better sense of the number of calls for service addressed by officers. While CAD does trace a number of calls for service, it is clear that CAD data does not address all the calls for service. It would be helpful to understand the full range of calls for service.

EARS could also be modified to track calls for service that officers were unable to address. Such data would be invaluable in charting staffing levels and deployment. EARS data in combination with other data sources provides key information in determining officers do, and equally important for purposes of identifying appropriate staffing, what officers are not able to address.

#### **SECTION 4: OTHER AGENCY INFORMATION**

Personnel information was retrieved from other agency databases and documents:

- ❑ **Union Contract.** Information on work schedule rules, leave and holiday time, residency requirements, bidding and seniority clauses.
- ❑ **Vessel Use Report.** Information on use of department vessels by region, by number of hours, and by month.
- ❑ **Agency Administered and Controlled Lands.** A database was generated that identified the number of acres in each county in these designations.
- ❑ **Shellfish Zones.** An inventory of zones utilizing information gathered from a number of department web postings. Zones were designated and grouped by county in our databases. Included in the analysis were prohibited shellfish areas.
- ❑ **Hunting Incident Report.** Information on hunting accidents/incidents.
- ❑ **Boat Access Areas.** A database of all WDFW boat access points in the State that are patrolled by WDFW officers, broken down by county and region.
- ❑ **Department Personnel and Roster.** A detailed listing of officers and assignments down to the detachment level.
- ❑ **Agency Enforcement Priorities.** Agency enforcement priorities are set out in a document. The department's Annual Report also provides key information.
- ❑ **Hunter Education Classes.** Hunting education by county.
- ❑ **Hunting Seasons.** Data was downloaded from the department Web site to identify workload generated by hunting seasons and to address the seasonality of workload.
- ❑ **Hunting, Fishing, and Shellfish Licenses.** Information on hunting licenses by county and region to identify the number of hunters, fishermen, and shell fishers, potentially in the field.
- ❑ **Hydraulic Permits.** A number of department databases and reports were reviewed on hydraulic permits.
- ❑ **Department Policy and Procedure Manual.** Key information on department operations and procedures.

- **Vessel Registrations.** Number of all registered watercraft, by county.
- **Listing of Tribes and Reservations.** List of tribes, reservations, and tribal areas, by county.

#### **SECTION 5: GOVERNMENT DATA SOURCES**

- **County Demographics/Characteristics.** Utilizing a series of data sources, particularly the U.S. Census, a profile was established for each county. Particularly important are 2007 population estimates. Land and water area data were also collected, by county. A matrix was developed and statistical correlations/regressions were utilized to identify associations between current deployment and county characteristics.
- **Registered Watercraft.** Boating registration is linked to workload and will be used as a factor to deploy officers. While vessels may be used other than where they are registered, the majority of their use is close to the registration site.
- **Shoreline Configurations.** Coastal, rivers, lakes, and bays. Statistics on water acreage within counties and miles of coastline.

## **CHAPTER V. WORKLOAD FACTORS (DRIVERS)**

This section of the report will:

- ❑ Review the interactions among data resources
- ❑ Choose the data resources that are most efficient for deployment and staffing
- ❑ Suggest future data adaptation to make staffing calculations more efficient

### **SECTION 1: DIRECT AND INDIRECT MEASURES**

Two types of measures identify the amount of law enforcement work that a county requires, direct and indirect. Indirect measures are widely used in the security industry and in natural resource oriented law enforcement. Analysis of indirect measures are frequently referred to as risk or hazard analyses. Direct measures are immediately related to the actual work required, such as data in EARS. A direct measure, for example, would be number of calls for service for nuisance, dangerous, or injured animals that WDFW officers must address. For example, an indirect measure would be the number of people in the county coupled with an estimate on the average number of calls for service triggered per thousand population for nuisance, dangerous, or injured animals.

Direct measures are generally preferable. They provide a more exact estimate of the time and effort. For some workload elements direct measures are available. For example, Hydraulic Permits should be checked by officers while on patrol. At present there is insufficient information on some important elements of officer workload to develop direct measures of workload. For these work elements, indirect measures are required to supplement direct measures.

### **SECTION 2: A CONSERVATIVE ESTIMATE**

This report recommends doubling the number of WDFW officers. Considering the range of duties and tasks, the size of the state and its adjacent waters, the number of hunters and fisherman, the current threat to fishing stocks, and the value of the resources, many readers will come to agree that our recommendation is conservative. We did, in fact, deliberately fashion a conservative estimate. How this was accomplished should become clear in the following analysis.

### **SECTION 3: STAFFING AND DEPLOYMENT MEASURES**

Four core missions focus agency activities:

- ❑ Protection of the fish resources;
- ❑ Protection of the wildlife resource;
- ❑ Protection of habitat; and
- ❑ Ensure public safety

Four sets of variables drive the workload requirement to achieve these core missions:

- ❑ **Land Variables**: workload is driven by amount and nature of the land patrolled
- ❑ **Water Variables**: workload is driven by the amount and nature of the waters patrolled
- ❑ **Regulatory Variables**: workload is driven by the amount and nature of regulatory activities that officers must undertake
- ❑ **Population**: The size and the nature of the population addressed have important implications for workload

### **SECTION 4: LAND WORKLOAD DRIVERS**

For resource law enforcement, the amount and nature of the land patrolled is a key and perhaps the most important workload driver. Land patrols are driven by several key factors. Inland patrols:

- ❑ Protect wildlife and habitat
- ❑ Protect fish and interdict dockside illegal fish and shellfish takes
- ❑ Address environmental abuses such as dumping and toxic spills
- ❑ Ensure safer hunting
- ❑ Provide assistance to endangered and threatened species
- ❑ Serve a public safety function in rural areas.

Washington has numerous hunting seasons. Legal hunting occurs nearly all year long. Supervising hunting is a major patrol activity for WDFW officers and occurs throughout the state and during most of the year.

Current officer distribution is strongly correlated with a county's square miles of land area (correlation =.619). WDFW has worked to deploy its officer in a manner consistent with workload demand. Land area irrespective of population is itself a key variable in generating work for officers. Acreage interacts with workload in several ways. To be manageable a patrol area must be so configured so that an officer can reach any point in the area within a reasonable time frame. This permits reasonable response times.

Area size is important. Land patrols are frequently by foot, off-road vehicles, and when in a truck on dirt roads. Such patrols are time consuming. Wildlife is most commonly located in large expanse of forest, mountain valley, or upland. Transit time consumed traveling between sites also consumes officer resources.

Environmental threats of dumping, abuse of land, and other illegal activities make it necessary for officers to patrol areas with sufficient regularity to provide a deterrent effect, and to interdict offenders. Officers are clearly limited in the amount of land that they can patrol with any regularity. Hence number of square miles is a prime variable upon which to develop estimates for required staffing.

In the next section of the report, multipliers (formulas that link acreage to number of officers required per square miles patrolled) will be developed. The methodology employed is similar to that utilized by the Washington State Patrol to identify optimal staffing. The Patrol Allocation Model (PAM) identifies a minimum staffing level by county and then uses road mileages as a multiplier to establish number of officers assigned to each county. Since resource law enforcement officers are responsible for lands beyond the roads, square mileage of the area under study will used as a multiplier.

## **SECTION 5: IDENTIFYING LAND WORKLOAD DRIVERS - SPECIALLY PROTECTED LANDS**

Certain lands require more intensive patrol -- wildlife areas and agency owned, controlled, and contracted areas. The agency has cooperative agreements with private landowners to patrol their lands. Timber companies have entered into agreements with WDFW to have their areas patrolled by officers.

There are several categories of "protected lands." Wildlife areas are the most common. There are national wildlife refuges (where jurisdiction is shared with federal officers),

Wildlife Areas (WLA), and a number of local, state, and national parks. Agency owned and agency protected lands involve extensive acreage - 1,082,972.52 acres. There are also 1,133,559 additional acres that are identified as Hunter Partnership Acres which WDFW officers are responsible by contract to patrol.

This listing, while it addresses most of the areas requiring special patrols and attention by WDFW officers, is not complete. Information was not available on some of the contract lands. These figures will underestimate the areas that receive special patrols. As developed earlier, estimates of officers needed to patrol special areas will be conservative, due to lack of data concerning some areas.

Several factors argue for more intensive patrol of protected lands:

- These protected lands frequently have environmentally sensitive areas needing special attention.
- Many of these areas permit hunting. To ensure safe hunts intensive WDFW patrols are required.
- Public lands - having no owners - are seen by some as areas for dumping, theft, and other abuses.
- Endangered and threatened species inhabit some protected areas and need special protection.

Special areas will receive slightly highly staffing to ensure a higher level of patrol. For state police, a higher multiplier is used for interstates. For WDFW, a similar methodology will be used to provide more intensive patrols for Wildlife Areas, and Agency owned or controlled property. Size and number of areas protected is very weakly correlated with current officer assignment ( $r = .120$ ). In the next chapter of this report, a multiplier for acreage of protected areas will be associated with staffing requirements.

## **SECTION 6: IDENTIFYING LAND WORKLOAD DRIVERS - WDFW WATER ACCESS POINTS**

Water access points require more intensive patrols. WDFW water access areas are popular sites for fishing, boat launching, and are gathering points for young people. Patrols are needed to protect parked vehicles and ensure public order. Water access points are important sites for checking parking permits, fishing licenses and monitoring



Enforcement Program Staffing Requirements

Counties	Acres of Land	WDFW Owned Land	WDFW Controlled Land	WDFW Contract Land
Adams	1,232,000	871.20	1,759.84	
Asotin	406,400	37,315.76	2,724.74	19,000.00
Benton	1,089,920	5,808.37	7.36	
Chelan	1,869,440	27,208.01	6,616.32	
Clallam	1,112,960	828.80	361.86	
Clark	401,920	2,765.38	76.23	
Columbia	555,520	10,497.08	1.50	
Cowlitz	728,320	4,159.57	1,258.50	
Douglas	1,164,800	16,166.56	1,772.40	4,500.00
Ferry	1,409,920	6,902.17	1,212.53	4,840.00
Franklin	794,880	1,790.64	9,254.98	
Garfield	454,400	4,872.96	1.10	
Grant	1,715,840	39,569.09	164,064.13	
Grays Harbor	1,226,240	6,055.15	218.17	
Island	133,120	1,451.51	0.00	
Jefferson (1)	1,160,960	1,423.41	68.93	
King	1,360,640	1,165.94	120.43	
Kitsap	252,800	1,408.91	27.57	
Kittitas	1,470,080	169,444.01	14,694.56	20,000.00
Klickitat	1,198,080	13,607.62	3,225.45	
Lewis	1,540,480	481.30	6,623.97	
Lincoln	1,479,040	19,329.53	1,307.02	
Mason	615,040	1,239.12	251.07	
Okanogan	3,371,520	70,259.10	17,827.64	
Pacific	596,480	3,539.66	904.08	
Pend Oreille	896,000	705.35	259.95	37,540.00
Pierce	1,073,920	3,495.50	145.61	28,500.00
San Juan	111,360	263.40	0.00	
Skagit	1,110,400	14,462.86	1,914.31	
Skamania	1,059,840	305.03	345.96	30.00
Snohomish	1,336,960	2,420.65	1,126.40	
Spokane	1,128,320	365.97	16.11	8,320.00
Stevens	1,585,920	217.60	210.62	35,780.00
Thurston	465,280	2,710.88	1,263.88	
Wahkiakum	168,960	298.74	276.55	
Walla Walla	812,800	208.95	750.88	
Whatcom	1,356,160	2,890.73	1,031.99	
Whitman	1,381,760	2,291.00	36.63	
Yakima	<u>2,749,440</u>	<u>80,836.43</u>	<u>16,069.31</u>	<u>107,000.00</u>
<b>State</b>	<b>42,577,920</b>	<b>559,633.94</b>	<b>257,828.58</b>	<b>265,510.00</b>

fish catches. There are a large number of these areas (589 WDFW controlled), and WDFW officers spend considerable time patrolling these sites. WDFW water access points are moderately correlated (.387) with current officer deployment.

Water access points must be factored into staffing requirements analysis. WDFW water access points will be a direct measure. A multiplier for this variable is developed in the next chapter.

## **SECTION 7: WORKLOAD DRIVERS - WATER-RELATED ACTIVITIES**

WDFW polices a coastal state that has the most active commercial fishery in the lower 48. Washington is facing a crisis as fish stocks are in decline. A marine workload driver is needed to ensure that coastal counties are able to protect land and marine resources.

Commercial shell fishing is a major endeavor. Most fish stocks and shellfisheries are in decline. To protect fish stocks, the federal and state governments have declared a number of areas closed to fishing and developed complex regulation and seasons to allow fish stocks to recover. WDFW officers are the primary enforcers of regulations and closed areas. While regulations and closed areas have been increasing in complexity and numbers, the number of enforcement officers to enforce these more rigorous regulations has been actually declining.

Recreation fishing both salt and freshwater is tremendously popular with 663,033 fishing licenses sold in 2007. There are 6,907 licensed fishermen for every WDFW enforcement field officer. In addition, there are also a large number of commercially licensed fishermen which demand far greater enforcement scrutiny.

Most Washington marine based recreational boating and fishing occurs close to shore. The most highly utilized waterways are generally protected harbors, bays, estuaries, straits and sounds. These areas are not only favored by boaters, but house resources such as shellfish beds, marine mammals, and serve as nurseries for a wide variety of fish. These areas are ecologically fragile and require close monitoring of vessel traffic for resource protection. The concentration of boats in these areas raises safety issues.

This variable has particular salience for the Puget Sound and the large bays and harbor areas of the coast and the areas around the San Juan Islands, to cite several but certainly not all. The mouth of the Columbia River is a high volume area for fishing and recreational boating.

Coastal counties must share their officers between the marine environment and the land. In essence coastal counties have double duties since they must undertake the same

land patrols, plus be responsible for marine activities as well. In Chapter VI., a special multiplier is described for coastal counties to account for marine based activities, similar to what was developed for land areas.

Vessel patrols are personnel intensive. Properly staffed vessels require at a minimum two officers, larger off shore vessel require three. Federal Law Enforcement Training Center (FLETC) guidelines for staffing for off-shore, large vessels is four officers; a standard that the IACP has adopted in its natural resources law enforcement deployment studies.

Three special concerns related to endangered species and federal contracts also require additional officers:

- ❑ Shellfish regulation and protection of public health
- ❑ Regulation/Protection of Halibut and other groundfish resources
- ❑ Regulation/Protection of the Salmon and Steelhead resource

Each of these special concerns has associated with them, enforcement and regulation plans that have important implication for staffing and deployment. Two areas of special concern halibut/groundfish protection and protecting the salmon resource are associated with federal contracts that provide reimbursements for enforcement activities. These contracts provide a readymade (direct) multiplier for staffing.

## **SECTION 8: IDENTIFYING MARINE WORKLOAD DRIVERS - SHELLFISH AREAS**

Washington's clam, oyster and mussel industry alone is a \$100 million dollar per year industry. Fish and wildlife officers are tasked to enforce sport and commercial shellfish regulations. This requires patrols of shorelines and marine waters to detect violations, contact harvesters and ensure compliance with seasons, limits, licenses and reporting requirements. Officers are also often called to respond to property disputes and accusations of theft where private property harvest occurs. Officers also conduct inspections at wholesale dealer/buyer locations, airports and border crossings, and at retail markets and restaurants.

The state of Washington is a member of the National Shellfish Sanitation Program (NSSP) and is required to perform to a national minimum standard for enforcing laws and regulations that protect consumers from consuming polluted shellfish. These standards include adequate laws and penalties, staffing, equipment and patrol

expectations. Failure of a state (or country) to perform satisfactorily (as determined by an annual audit by the USFDA) puts that state or country at risk of being removed from the NSSP. Only member states may export shellfish.

The state of Washington's shoreline has been divided into 90 different "growing areas" for the purpose of the sanitary shellfish program. Within these growing areas 52 "Patrol Areas" are identified and rated for their relative risk to consumers for uncertified shellfish harvest. The risk value is based on a formula that incorporates the amount of product in the patrol area, the "ease of harvest" and the "difficulty of patrol". Depending on the score, the patrol area is categorized as either no-risk, low, medium or high risk". The higher the risk category, the higher number or "frequency" of patrols area required by commissioned Fish and Wildlife Officers as mandated by the NSSP. Overall, each month in Washington, officers *must conduct* a minimum of nearly 1,900 separate "frequency patrols" in these patrol areas in order to satisfy the federally mandated requirements. Considering that the patrols average approximately three hours, the staffing requirement for this issue is considerable. A multiplier for shellfish enforcement is presented in Chapter VI.

## **SECTION 9: MARINE WORKLOAD DRIVERS - PROTECTING HALIBUT, GROUND FISH, AND SALMON**

By JEA Contract with NOAA, WDFW is required to mount a number of enforcement land and water patrols to enforce federal and state statutes and regulations relative to fishing and takes of groundfish and salmon. The contract sets three priorities.

- **Priority 1: ESA (Endangered Species Act) Salmon and Steelhead Protection/WOC (Washington, Oregon, California) Salmon**

**Off Shore/ At Sea Activities.** WDFW will patrol by vessel, the Exclusive Economic Zone (EEZ), inland marine, river estuary, and inland rivers for illegal ESA take with particular attention paid to selective commercial and recreational fisheries.

Hours, 1,300 sea hours

**Dockside Activities.** WDFW will patrol on foot, rivers and creeks to ensure ESA protection. Salmon landings will also be monitored.

Hours, 2,500 land hours

□ **Priority 2: WOC Groundfish/ Halibut**

**Off Shore/At Sea Activities.** WDFW will patrol fathom and rockfish conservation restrictions for both recreational and commercial fishery activities. Will enforce other federal groundfish and Halibut regulations at sea.

Hours, 1,000 sea hours

**Dockside Activities.** WDFW will monitor offloads of halibut and groundfish at dock and buying stations. Will also conduct investigations of illegal take of groundfish and Halibut.

Hours, 1,000 dockside hours.

□ **Priority 3: Dealers/Markets/Border/Airport (Lacey Act Enforcement)**

WDFW officers physically inspect wholesale fish dealers and buyers, along with secondary receivers such as cold storage, retail markets, and restaurants, to ensure that federally regulated species have been legally harvested, documented, and marketed. The U.S./Canada Border is also monitored for illegal foreign fishing activity and smuggling. Some of these patrols will be by water. Shore patrols will include cargo/document inspections at border crossings and at the airport.

Hours: 3,500 land hours.

The 2007-2009 JEA contract required a total of 2,300 vessel hours and 7,000 hours of land patrols. JEA contracts overlap, over the last few years the number of hours required to fulfill the contracts in a calendar year averaged about 7500 hours. The last five contracts required:

2003-2005 - 12,943 hours

2004-2006 - 11,669 hours

2005-2007 - 10,250 hours

2006-2008 - 3,145 hours

2007-2009 - 9,300 hours

2008-2010 - 7,024 hours

For purposes of developing a multiplier, the distribution of hours from the 2007 contract will be employed. On-water hours demand two to three officers. Near shore requires two officers, off shore three.

A direct multiplier has been established to identify the number of officers required to meet contractual requirements.

### **SECTION 10: WATER-RELATED WORKLOAD DRIVERS - INLAND WATER ACREAGE**

Areas of Washington have numerous inland lakes, streams, and ponds. Washington has over 391,323.6 surface acres of water. Larger lakes include Lake Washington, Lake Chelan, and Lake Roosevelt.

These freshwater areas are heavily used both for recreation boating and fishing. Our questionnaire analysis, EARS data, focus groups and field observation, all concurred that freshwater lakes and rivers/streams, particularly the Columbia River and its tributaries, are a major source of work for WDFW officers.

EARS recorded 43,943.2 hours involved in fish related patrol (43.8% of total patrols). In fact, as much as half the workload of inland officers, particularly during spring and summer months involved patrol by vessel, vehicle, and foot patrol of bodies of water and their shorelines.

Inland water surface acreage has a weak to moderate correlation (.225) with current posting of officers. A multiplier is employed to address workload related to fish resources in ponds, lakes, streams, and rivers.

### **SECTION 11: WORK DRIVERS - POPULATION**

As population grows, the wildlife problems become more frequent. Greater population densities require increasing activity by WDFW officers to protect resources, guard against environmental degradation, and address vandalism and theft on public lands. Population size is also related to the number of exotic pets, and required inspection of sale of fish and wildlife - requiring inspections. More people also translate into more recreational use of wild lands, from hiking to hunting.

Population is highly correlated with boating registrations, recreational fishing, habitat problems, hydraulic permits, and recreational use of wild lands. Populated coastal communities require more frequent patrols for shellfish violations.

Current distribution of WDFW officers is strongly correlated ( $r = .632$ ) with population. This is not surprising since WDFW has consistently tried to deploy officers by workload. Population is an important workload driver for both inland and marine officers.

## **SECTION 12: POPULATION WORKLOAD DRIVERS - VESSEL REGISTRATIONS**

Closely correlated with population is vessel registration. Washington has 273,125 registered recreational and commercial vessels. Commercial fishing vessels are an important source of work for WDFW officers.

Recreational watercraft can threaten resources – illegal fishing, groundings on sensitive aquatic environments, or injure marine life. Boaters can also pose a threat to other boats by unsafe operations and boating under the influence. In recent years, WDFW officers have become more involved in safe boating checks. The number of vessels is an important indicator of work for WDFW officers. Vessel registration is an important driver for officer staffing. It is, however, difficult to deploy officers based on vessel registration, since it is common for vessels to be moored and used in locations different from where they are registered.

Similar to hunting and fishing licenses, as recreational and commercial vessel registrations increase workload will also. County population is highly correlated with vessel registrations ( $r = .892$ ). Vessel registration by county may be misleading as a county staffing multiplier, since owners frequently boat in areas other than where a vessel is registered. In other studies, the IACP has suggested adding a question on vessel registration applications about where the boat is generally used, which can assist in making the vessel registration more closely assigned with officer workload requirements.

## **SECTION 13: POPULATION WORKLOAD DRIVERS - HUNTING AND FISHING LICENSES**

Hunting is a major activity in Washington with 835,908 big game licenses and 181,529 small game licenses. While the number of hunters is substantial, the number of officers supervising the hunt has been declining. In 2007, there was one WDFW officer for every 11,703 hunters.

Fishing has a similar and important impact on workload. Fishing pressure tends to increase in the spring and early summer. Fishing is active in both freshwater and

marine environments. Fishing has two aspects, recreational and commercial. In 2007, there were 663,033 fishing licenses sold.

The more fishing and hunting licenses issued, the more work that WDFW officers face. As a workload driver they can assist in identifying gross staffing needs. Due to the nature of the databases, licenses cannot assist in deployment decisions.

Licenses can be associated with the county in which they are sold. However, hunters and to a lesser extent anglers often travel considerable distances from their homes to hunt or fish. The middle and eastern parts of Washington are good examples of this dynamic. These areas draw hunters often from the western part of the State. As a result it is difficult to determine where licenses are actually being used for hunting.

A second problem with license data is that while there are separate licenses for hunting and fishing and specific sub licenses for specific fish and animals, there are also a large number of combination licenses that make it difficult to identify whether the person is fishing in salt or fresh water or hunting.

Sales of hunting and fishing licenses, however, can serve as a workload driver. As sales of licenses increase, workload for WDFW officers will also increase. It is, however, difficult to deploy officers given the inability to link where the hunting and fishing is occurring.

Hunting and fishing licenses are highly related to population. By county, fishing licenses strongly correlate with population ( $r = .821$ ). Hunting licenses also strongly correlate, but to a lesser extent than fishing, which suggests that rural populations tend to hunt disproportionately when compared to urban populations ( $r = .4850$ ).

#### **SECTION 14: POPULATION WORKLOAD DRIVERS - CALLS FOR SERVICE**

Calls for service are a workload driver of increasing import. As population grows, calls for services increase. Increasing calls for service are particularly problematic, since 42.1% of calls for service presently do not receive a timely response. CAD data did not permit calls for service to be detailed county by county. Calls for service, however, could be analyzed by region. Analyzing calls for service by region, calls for service was found to be strongly correlated with population with  $r = .628$ . With calls for service not available for county level deployment, population can serve as an indirect measure for calls for service.



## **SECTION 15: WORKLOAD DRIVERS - REGULATORY ACTIVITIES**

The list of regulated activities which WDFW officers are expected to patrol includes:

- Game farms
- Taxidermists
- Wildlife rehabbers
- Falconers
- Fish Markets
- Border crossings (Lacey Act)
- Airport (Lacey Act)
- Restaurants
- Meat lockers
- Exotic pets (pet shops)
- Wholesalers
- Wildlife dealers
- Commercial docks
- Commercial and recreational boats
- Nets, fish traps
- Fur traders
- Hydraulic Permit Applications

Specific data are not available for most regulated activities nor is the number of regulated sites. Workload multipliers could not be established for most regulated activity. However, there is good data for the most common and time consuming of the regulatory checks - Hydraulic Permit Applications. Hydraulic permit regulation is the most common and time consuming of checks conducted by WDFW Officers. HPA checks involve between 5% and 7% of officer workload. Data is available on HPA.

## **CHAPTER VI. STAFFING WDFW'S ENFORCEMENT PROGRAM**

In this section, a link is established (a multiplier) between the workload drivers and staffing/deployment requirements. Linking the driver and the multiplier produces a staffing recommendation. This section will focus only on officers. The next section of this report will address supervisory and support staffing.

### **SECTION 1: STAFFING INDICATORS**

Interviews, field observations, questionnaire responses, stakeholder analyses, state growth, and agency data all support the need for additional staff resources.

- ❑ All but one questionnaire reported that important patrols are not being accomplished due to staff limitations. Declining levels of officer initiated patrols are highlighted consistently.
- ❑ Stakeholders provided a consistent message that WDFW needs to show more presence, as well as reduce response times to calls for assistance.
- ❑ Citizens consistently note that WDFW officers are not doing enough to protect fish, wildlife, and habitat.
- ❑ The number of hunting and fishing licenses has increased dramatically in the last decade, yet enforcement has declined.
- ❑ Population growth has not been offset by a proportional increase in officers.
- ❑ Marine patrols are far too limited.
- ❑ Additional habitat responsibilities have not been matched by increases in staff or resources.
- ❑ Homeland security and disaster response duties have been delegated to WDFW law enforcement without an accompanying increase in personnel.
- ❑ A sizeable proportion of calls for service are not receiving a response due to lack of available officers. (42.1%)

## **SECTION 2: COUNTY DEPLOYMENT**

All areas of the state deserve at least a minimum level of resource protection. To respond effectively, officers must be deployed to make response time reasonable and create manageable spaces to enable officers to get to know both the area and people (community policing). The basic building block for this staffing exercise is the county. Several factors argue for this approach:

- ❑ This is the deployment base currently used by the agency.
- ❑ Information is collected by county.
- ❑ Workload distribution suggests that deployment by county makes sense.
- ❑ A larger area would defeat community policing efforts.
- ❑ A larger area would make it difficult for officers to learn geography, resources, back areas, and the location of illegal activity.
- ❑ County level data elements are generally available.

While deployment recommendations will be by county, officers may be detailed to surrounding areas from time to time. During emergencies officers will be sent to other areas of the state. Calls for service will require officers to cross county lines and patrol in surrounding counties. Resource law enforcement requires flexibility in deployment.

There is a unique mix of work tasks, environments, and necessary knowledge that varies by area patrolled. This has two important implications for deployment. An area should be sufficiently limited geographically so that officers can learn habitats, travel routes, and other key elements. Secondly, deployment of officers to areas should be long term. These reasons are key strategies in contemporary law enforcement and clearly support WDFW community policing goals.

## **SECTION 3: BASE STAFFING LEVELS**

The first step in developing multipliers for workload drivers is to establish statewide base staffing levels. Theoretically, a number of methodologies can be used to establish base staffing levels. A patrol interval goal for a land or water area can be established and then the number of staff needed to meet that interval can be calculated. This methodology is commonly employed by state police. This methodology is used by the Washington State Patrol. This study relies heavily upon this methodology. We used

this methodology successfully in staffing studies for the National Park Service, U.S. Fish and Wildlife Refuge System, and the Florida Fish and Wildlife Commission, the largest state natural resource enforcement agency in the United States.

Workload-based measures are commonly employed in law enforcement agencies, particularly municipal police agencies whose workload is largely call driven. IACP has long employed CAD based methodology to forecast staff levels for municipal law enforcement agencies throughout the country. Workload based methodologies review actual time spent by officers on enforcement activities (operational labor) and then estimate based on the current time spent in enforcement, and whether officers are able to meet organizational goals and mission with staff assigned. When workload exceeds current staffing, workload measures provide a platform to calculate officer numbers to adequately address existing demand. These estimates take into account the need for administrative time, patrol time, and other duties.

Workload measures are most commonly based on CAD data but other data sources can and have been utilized. CAD data lacks sufficient information to serve as a platform to estimate staffing level. CAD, however, does provide strong support to the contention that additional staff is needed by WDFW to address current workload.

#### **SECTION 4: IMPROVING AVAILABLE PATROL TIME**

As developed in previous chapters, patrol by resource officers is the most important work conducted by WDFW officers. Resource patrols include patrolling wild lands, stream banks, shellfish beds, and a constellation of other habitats. Patrols also include checking on hydraulic permits to ensure that shorelines are not degraded, checking on shellfish wholesalers to ensure that the oysters and clams are safe. As has been pointed out a number of times earlier in this report, resource policing varies significantly from municipal law enforcement in that a snagged endangered salmon, a toxin laden oyster, and a poached elk, do not report their victimization via 9-1-1.

At the heart of resource protective law enforcement are regulatory checks, land, and marine patrols. Patrol is the key to successful resource oriented enforcement. Resource law enforcement through aggressive officer initiated patrols must uncover resource threats such as poaching, out of season hunting and fishing, and habitat destruction through patrolling critical areas, observing regulated activities, and ultimately confronting perpetrators.

EARS provides information on hours spent on varied elements of officer work and identifies officer time committed to patrol. EARS reported in 2007 a total available labor time of 244,913.8 hours.

In 2007, EARS reported 100,259.9 hours of patrol by its commissioned officers. Patrol hours consumed 40.9% of total officer work activity. In resource law enforcement, whether it be the National Park Rangers, National Fish and Wildlife Rangers, or State Fish and Wildlife officers, Officer patrols should consume between a minimum of 50% of officer time and optimally 60% of officer overall work activity.

### **SECTION 5: MINIMUM STAFFING FOR COUNTIES**

For officer safety and operation purposes, minimum county staffing is set at either two or optimally three officers, to ensure a back up officer is available for serious calls. In addition, night time patrols require two officers. Vessel patrols should also have two officers.

To staff with two officers (minimum) or three officers per county (optimum) requires 78 officers (minimum) or 107 (optimum). For a few counties this staff level may be sufficient. Due to size, regulatory workload, population, adjacent marine areas, analysis suggests that a number of counties require officers the minimums.

Most counties already have two or more officers. Four counties, Adams, Douglas, San Juan, and Jefferson have no officers. Nine counties have only one officer assigned (Asotin, Columbia, Ferry, Garfield, Lincoln, Mason [1.5], Pend Oreille, Whitman, Wahkiakum, and Kipsap [1.5]). Further, staffing of counties varies somewhat over time due to retirements and transfers.

For nearly all counties, minimum staffing levels will not be necessary, since multipliers generate recommendations above the minimum.

### **SECTION 6: LAND PATROL RELATED MULTIPLIERS**

Two land-oriented variables are used for land patrol:

- ❑ County Acreage: Multiplier 1 FTE per 750 square miles
- ❑ Protected Lands: Multiplier 1 FTE per 125,000 acres
- ❑ Water Access Points: .019 FTE per water access point

Workload analysis revealed that land area is probably the single most important workload driver. All else being equal, the amount of land area determines the amount of resource to be protected, and the distances that must be traveled to protect those

resources. The sheer acreage (and in some refuges numbers square miles) to be patrolled is a key generator of work. Different types of land demand considerably more or less work from officers. Vast patrol areas present a problem when trying to enforce laws, especially those regarding species that are rare, valuable, or numerous. Sigler (1972, 108) asserts that “when wild animals are so available that the opportunities of committing violations against them are numerous, and at times it is difficult, if not impossible, for enforcement to eliminate or neutralize these opportunities.”

To estimate an appropriate area that an officer could realistically patrol, subject matter experts were interviewed, officers were interviewed, previous research into this subject was reviewed, and the professional literature was examined. We also asked, WDFW staff, supervisor and command personnel, “how many officers do you estimate are needed to patrol your region and your county?” Estimates varied. In looking at other studies, we found estimates generally running from 200-300 square miles. In Florida, for example, the recommended level was approximately 300 square miles for each officer. Texas currently has one wildlife warden for every 500 square miles. California has one officer for every 650 acres. For national park rangers and U.S. Fish and Wildlife officers recommended square miles per officer is considerably lower.

If one deducts the 15 officers assigned to marine duties at the time of our analysis, the average land area covered by regional officers is 927 square miles. Without deducting marine officers, Washington has one officer for every 774 square miles. Comparisons based on square miles are questionable since duties and responsibilities vary considerably among fish and wildlife agencies. Responsibility, for example, for an active and highly regulated coast, makes for a far larger workload for Washington when compared to inland states such as Montana or Idaho.

There is considerable evidence that land areas patrolled are too extensive. While IACP believes that a land multiplier of between 300-500 square miles is far more appropriate, given our conservative approach, a conservative and extremely defensible multiplier of a maximum of 750 square miles per officer assigned to a county was established.

To establish a base statewide staffing multiplier of one officer per 750 square miles of land requires 88.73 officers be assigned to 39 counties. This staffing level per county will provide routine land patrols. However, this will provide only routine patrols which will be insufficient for areas requiring more intensive attention.

Agency owned/controlled lands require special protection and far more intensive patrols. Public lands without a private land owner to protect the resources must rely on more intensive patrols by WDFW officers. Officers consistently noted that these lands required special attention and additional patrols that officers were unable to provide due to the press of other activities. To develop a multiplier for staffing agency owned

and administered lands, officers and subject matter experts were interviewed. Previous research drawn from Florida, the National Park System, and U.S. Fish and Wildlife Refuges were analyzed. A multiplier similar to that developed in Florida of 67,000 acres for 1 FTE officer was used. For Washington, we propose an even *more conservative multiplier of 125,000 acres per WDFW officers*. This additional staffing is meant to supplement county level officer land supervision of areas requiring more intensive patrol. This supplemental staffing multiplier will require an addition of 17.74 officers.

WDFW-maintained water access points, another land-based work-related driver, require approximately three checks a week, with an average of a half hour per check (includes travel time and higher during season), 156 hours per year per water access point. Checking water access points should be a routine duty, accomplished by officers assigned to counties. Since WDFW water access points are not equally distributed, and counties with a higher proportion of water access points would be unable to address them, a supplemental staffing multiplier is recommended. We recommend that one of the three checks a week be supplemented with additional staff. This requires staffing to address 52 hours per year for each of the 589 water access points. With availability of officers of 1,851.86 hours per year, after deducting 462.965 for administrative duties, the average time to engage in work for an officer is 1,388.895 hours per year. Contrasting this with the 26 hours to patrol water access points, with 589 water access points leads to a multiplier of .019 FTE per water access point. This requires 11.2 additional officers.

### **SECTION 7: WATER PATROL MULTIPLIERS**

The IACP has adopted the FLETC guideline of four officers for such off-shore operations and recommended that level of staffing for the Florida Fish and Wildlife Commission off-shore boats as opposed to the current WDFW standard of three officers.

For projecting staff for marine patrols, a direct multiplier is used. To maintain a deterrent and enforcement presence on the coast and in the sound, a minimum number of patrols are required. Given the size of the sound and the length of the coast, these patrols should be distributed geographically along the coast. Each patrol unit requires a minimum of two officers for routine near shore patrols, and four officers for offshore patrols.

These shore patrols are directed to specific areas:

- ❑ Vessel Patrols Puget Sound
- ❑ Pacific Coastline: Near shore Patrols

- ❑ Columbia River
- ❑ Offshore Fisheries: Gray's Harbor, Port Angeles, and Anacortes.
- ❑ Shellfish Areas: along the Pacific Coast, the Straits, and Puget Sound. These patrols would be a combination of vessel and land patrols.

Two other multipliers are used to ensure sufficient staffing:

- ❑ Market and Landings Checks : Land based.
- ❑ Inland Water Acreage: To provide additional vessel patrols on inland waters, a multiplier of 1 FTE for every 40,000 acres of inland surface waters was developed, resulting in 9.78 additional officers.

**Puget Sound Patrols.** WDFW 's enforcement program requires *at a minimum* four vessels to patrol Puget Sound, two officers for each vessel patrol. This is a very conservative estimate. Three patrols will only lead to an average of approximately two to three patrols per day for between five to six hours during the 24 hours that comprise a day. This is a large and populated area. Vessel traffic is high.

Eight officers are required. They should be located or stationed at:

- ❑ North Puget Sound
- ❑ Central Puget Sound
- ❑ East Puget Sound
- ❑ South Puget Sound.

**Coastal Patrols.** A direct multiplier is used to staff this marine component. We recommend three inshore vessel patrols to provide deterrent patrols, ensure public safety, and interdict perpetrators. Coastal Washington is broken into three main patrol areas:

- ❑ The Straits of Juan De Fuca and the North Coast,
- ❑ Grey's Harbor and the adjacent coast north,
- ❑ The mouth of the Columbia River.



A staff of two officers are recommended, a total of six officers for near shore coastal patrols.

**Columbia River Vessel Patrol.** The Columbia River with its important salmon runs, endangered salmon species, and other important fisheries (sturgeon, smelt, etc.) requires additional special vessel patrols. It is recommended that six additional officers be assigned to Region 5 to address reaches of the Columbia River to conduct vessel patrols on a regular basis.

**Offshore Vessel Patrol.** To address federal contracts and to enforce federal and state fishing regulations offshore, we recommend three offshore vessels, four officers each, a total of 12 officers. This is a very conservative staffing. In essence, Washington would have the capacity to have only three vessels to patrol the extensive area out to 200 miles off shore and monitor the exclusion zones. These off shore vessels would be located at Anacortes, Port Angeles, and Westport.

**Shellfish Regulation.** As developed in the previous chapter, to meet federal and state requirement, WDFW officers must conduct regular checks on shellfish beds. A majority of these checks can be land based. Based on the United States Department of Agriculture (USDA) regulations, WDFW officers must conduct an average of 1900 checks per month of shellfish areas. The department estimates that these requirements require the equivalent of 11 full time staff. These staff will be deployed by the number of shellfish beds in an area.

**Market and Dockside Checks.** Buyers and wholesalers of fish and shellfish, along with retail markets and restaurants should optimally be inspected monthly. The Airport (SEATAC) also requires frequent checks since it is a major shipping point for fish and wildlife products both outgoing and incoming. The Canadian Border is another interdiction point where fish and wildlife product must be inspected as either they enter or leave the state.

Local markets and restaurants are also locations where unsanitary or illegally gathered fish or shellfish product may be sold. Performing inspections of varied markets and restaurants also reduces poaching and illegal fishing and shell fishing by denying outlets for illegally gain products.

Federal contracts also require that state WDFW officers conduct approximately 7,000 hours of market and dockside checks a year for specific fish. The demand for inspections are particularly high in Region 4 which is highly populated and the center of seafood wholesaling and marketing. It is recommended that five FTE Officers be assigned to address the checking of markets, wholesalers, and restaurants.

**Inland Water Acreage.** Areas of Washington have numerous inland lakes, streams, and ponds. Washington has over 391,323.6 surface acres of inland waters. Larger lakes include Lake Washington, Lake Chelan, and Lake Roosevelt. These freshwater areas are heavily used both for recreation boating and fishing. Our questionnaire analysis, EARS data, focus groups and field observation, all concurred that freshwater lakes and rivers/streams, particularly the Columbia River and its tributaries, are a major source of work for WDFW officers.

Those counties containing large bodies of water will require vessel patrols in addition to the land patrols. To provide sufficient staff to ensure that sufficient patrols can address land and water issues in inland counties, a multiplier has been established for water acreage and number of rivers and streams. These multipliers will be modest since officers have already been assigned by land area (which includes water acreages). There is a total surface acreage of 391,323.6 acres.

To provide additional staff to address vessel patrols on these waters a conservative multiplier of 1 FTE per 40,000 acre feet of surface water was utilized. This will deploy 9.78 additional officers.

### **SECTION 8: POPULATION MULTIPLIER**

Additional officers are needed to address the agency's growing problem in responding to calls for service in a timely manner. It is our estimate based on the analysis of CAD and EARS data to address a significantly higher proportion of calls for service, taking into account the additional officers already provided, the Department will require 12.48 additional officers. These officers should be assigned to those areas where population is driving higher ratios of calls for service. Population is highly correlated as well with vessel registration and land area. To avoid over counting the influence of population, a fairly low population multiplier has been utilized.

Population: Multiplier officer per 514,000 population.

### **SECTION 9: REGULATORY ACTIVITY MULTIPLIER**

WDFW officers while on patrol conduct a large number of regulatory checks. They may check meat lockers for poached game, or a taxidermist shop for illegal takes. Checks for sanitary seafood and illegal fish has already been discussed. For most regulatory activity we do not have sufficient data to generate adequate workload multipliers.

Hydraulic permit checks are an exception. There is data on how many checks must be made and there is also information as to how long these checks take. It is also clear that due to heavy workload a large number of these checks are not being fully done. In 2007, there were 5,467 permits issued. Slightly less than half of the HPA permits were checked by officers. To increase the proportion of HPAs checked by officers, based on average time from EARS, it is estimated that an additional four officers are required to address HPAs. These officers will be distributed by the location of HPAs.

### **SECTION 10: DEPLOYING WDFW PATROL**

The multipliers just developed have been arrayed in an Excel spreadsheet with the data on these key variables for each of Washington's counties. These multipliers have been used to distribute by county the number of officers identified by the previous staffing analysis.

Table 4 provides an overview of officers deployed by county and contrast this number with current deployment. The current numbers for counties only includes patrol officers. Additional detectives and supervisors will be recommended in Chapter VII.

At the end of this chapter, a printed version of the spreadsheet that deploys officer is detailed.

Table 5 provides a summary of field officers and field sergeants proposed detailed by county and by region.

<b>Table 4</b>			
<b>CURRENT AND PROPOSED OFFICER STAFFING BY COUNTY</b>			
<b>Region</b>	<b>County</b>	<b>Current*</b>	<b>Proposed</b>
1	Asotin	1	2
1	Columbia	1	2
1	Ferry	1	3
1	Garfield	1	3
1	Lincoln	1	4
1	Pend Oreille	1	3
1	Spokane	3	4
1	Stevens	3	4
1	Walla Walla	2	3
1	Whitman	1	3
2	Adams	0	4
2	Chelan	3	4
2	Douglas	0	5
2	Grant	4	9
2	Okanogan	4	9
3	Benton	4	4
3	Franklin	2	4
3	Kittitas	2	5
3	Klickitat	2	7
3	Yakima	3	7
4	Island	1	5
4	King	9	11
4	San Juan	0	5
4	Skagit	5	8
4	Snohomish	5	6
4	Whatcom	3	6
5	Clark	3	4
5	Cowlitz	4	5
5	Lewis	3	4
5	Skamania	2	2
5	Wahkiakum	1	2
6	Clallam	4	9
6	Grays Harbor	4	11
6	Jefferson	0	5

<b>Table 4</b>			
<b>CURRENT AND PROPOSED OFFICER STAFFING BY COUNTY</b>			
<b>Region</b>	<b>County</b>	<b>Current*</b>	<b>Proposed</b>
6	Kitsap	2	4
6	Mason	2	3
6	Pacific	3	5
6	Pierce	4	7
6	Thurston	3	2
<b>TOTAL</b>		<b>96</b>	<b>193</b>
* During Study Period			

Table 5					
PATROL FIELD COMPLEMENT: OFFICERS AND SERGEANTS BY COUNTY AND BY REGION					
County	Region	Current Officers	Proposed Officers	Current Sergeants	Proposed Sergeants
Asotin	1	1	2		
Columbia	1	1	2		
Ferry	1	1	3		
Garfield	1	1	3		
Lincoln	1	1	4		
Pend Oreille	1	1	3		
Spokane	1	3	4		
Stevens	1	3	4		
Walla Walla	1	2	3		
Whitman	1	<u>1</u>	<u>3</u>	—	—
<b>Regional Total</b>		<b>15</b>	<b>31</b>	<b>3</b>	<b>6</b>
Adams	2	0	4		
Chelan	2	3	4		
Douglas	2	0	5		
Grant	2	4	9		
Okanogan	2	<u>4</u>	<u>9</u>	—	—
<b>Regional Total</b>		<b>11</b>	<b>31</b>	<b>3</b>	<b>6</b>
Benton	3	3	4		
Franklin	3	1	4		
Kittitas	3	3	5		
Klickitat	3	2	7		
Yakima	3	<u>3</u>	<u>7</u>	—	—
<b>Regional Total</b>		<b>12</b>	<b>27</b>	<b>3</b>	<b>4</b>
Island	4	1	5		
King	4	9	11		
San Juan	4	0	5		
Skagit	4	5	8		
Snohomish	4	5	6		
Whatcom	4	<u>3</u>	<u>6</u>	—	—
<b>Regional Total</b>		<b>23</b>	<b>41</b>	<b>5</b>	<b>7</b>

<b>Table 5</b>					
<b>PATROL FIELD COMPLEMENT: OFFICERS AND SERGEANTS BY COUNTY AND BY REGION</b>					
<b>County</b>	<b>Region</b>	<b>Current Officers</b>	<b>Proposed Officers</b>	<b>Current Sergeants</b>	<b>Proposed Sergeants</b>
Clark	5	3	4		
Cowlitz	5	5	5		
Lewis	5	3	4		
Skamania	5	<u>2</u>	<u>2</u>	—	—
<b>Regional Total</b>		<b>13</b>	<b>24</b>	<b>2</b>	<b>4</b>
Clallam	6	4	9		
Grays Harbor	6	4	11		
Jefferson	6	0	5		
Kitsap	6	2	4		
Mason	6	2	3		
Pacific	6	3	5		
Pierce	6	4	7		
Thurston	6	2	2		
Wahkiakum	5	<u>1</u>	<u>2</u>	—	—
<b>Regional Total</b>		<b>22</b>	<b>48</b>	<b>5</b>	<b>8</b>
		<b>96</b>	<b>193</b>	<b>21</b>	<b>35</b>

County Multipliers

Counties	Region	Land Area	Special Land	WAP	Puget	Coastal	Columbia
Asotin	1	0.84712	0.731588	0.228			
Columbia	1	1.158413	0.324341	0			
Ferry	1	2.93864	0.103638	0			
Garfield	1	0.9474	0.57872	0			
Lincoln	1	3.081613	0.578042	0.038			
Pend Oreille	1	1.867027	0.308042	0.152			
Spokane	1	2.35152	0.069617	0.19			
Stevens	1	3.3044	0.295774	0.152			
Walla Walla	1	1.694013	0.870871	0			
Whitman	1	2.87916	0.346389	0			
Adams	2	2.566613	1.373989	0.095			
Chelan	2	3.89516	0.296835	0.114			
Douglas	2	2.427373	1.25052	0.076			
Grant	2	3.574747	2.665466	2.147			
Okanogan	2	7.024093	0.710574	1.273			
Benton	3	2.270787	1.0235398	0.019			
Franklin	3	1.656533	0.717237	0.285			
Kittitas	3	3,06292	1.706069	0.133			
Klickitat	3	2.496493	1.974998	0.095			
Yakima	3	5.72844	0.013532	0.38			
Island	4	0.277907	0.010291	0	2		
King	4	2.83472	0.002107	0.703			
San Juan	4	0.233227	0.146385	0.057	1		
Skagit	4	2.31352	0.031704	0.627			
Snohomish	4	2.785413	0.031382	1.007			
Whatcom	4	2.82604	0.022733	0.209	1		
Clark	5	0.837627	0.043345	0.209			2
Cowlitz	5	1.518187	1.008041	0.228			2
Lewis	5	3.210187	0.056842	0.133			2
Skamania	5	2.208587	0.005448	0.038			
Wahkiakum	5	0.35232	0.004602	0.114			
Clallam	6	2.319267	0.009525	0.209		2	
Grays Harbor	6	2.555853	0.056227	0		2	
Jefferson	6	2.418973	0.011939	0.608			
Kitsap	6	0.52796	0.011492	0.247	2		
Mason	6	1.281413	0.013562	0.665			
Pacific	6	1.24396	0.03555	0		2	
Pierce	6	2.238547	0.257129	0.418	2		
Thurston	6	0.96936	0.034278	0.342			
<b>Total</b>		<b>88.72553</b>	<b>17.73385</b>	<b>11.191</b>	<b>8</b>	<b>6</b>	<b>6</b>



County Multipliers (Continued)

Counties	Offshore	Shellfish	Markets	Inland Water	Population	HPA	TE Officer	FTE Rounding
Asotin				0.0484	0.04144	0.001463	1.89801	2
Columbia				0	0.007977	0.002927	1.49366	2
Ferry				0.002335	0.014689	0.00878	3.06808	3
Garfield				0.9105	0.004572	0.078288	2.51948	3
Lincoln				0.364325	0.020039	0.104628	4.18666	4
Pend Oreille				0.277375	0.024514	0.081946	2.7109	3
Spokane				0.000075	0.877821	0.0439	3.53293	4
Stevens				0.3036	0.083658	0.08341	4.22254	4
Walla Walla				0.2064	0.113424	0.003658	2.88837	3
Whitman				0.02694	0.083074	0.00439	3.33995	3
Adams				0.0231825	0.034241	0.008048	4.101	4
Chelan				0.0000375	0.138521	0.00439	4.44894	4
Douglas				1.5656	0.070623	0.044631	5.43475	5
Grant				0.01605	0.160506	0.273642	8.83741	9
Okanogan				0.008925	0.077432	0.104628	9.19865	9
Benton				0.0083325	0.316926	0.107554	3.748	4
Franklin				0.7286875	0.131128	0.597768	4.11635	4
Kittitas				0.019875	0.074514	0.188037	5.18441	5
Klickitat				0.0074	0.455642	0.010975	6.59599	7
Yakima		1.875		0.325275	0.152529	0.168282	4.80928	5
Island		0.375	3	0.067555	3.621206	0.003658	10.6072	11
King		2.8125	0	0.1762275	0.030934	0.167551	4.62382	5
San Juan	4	0		0.484325	0.224319	0.059996	7.74086	8
Skagit		0.6563		0.004445	1.335214	0.094384	5.91409	6
Snohomish		0.4063	1	0.2518	0.366342	0.092921	6.17509	6
Whatcom				0.21525	0.671844	0.211451	4.18852	4
Clark				0.011725	0.190272	0.073166	5.02939	5
Cowlitz				0.316885	0.038716	0.086336	7.00843	7
Lewis				0.00005	0.144163	0.204134	3.74838	4
Skamania				0.1155375	0.020817	0.068045	2.45643	2
Wahkiakum				0.1363375	0.007782	0.291202	0.90624	2
Clallam	4	0.4063		0.2573	0.124862	0.0439	9.3701	9
Grays Harbor	4	0		2.07185	0.137743	0.097311	10.919	11
Jefferson		2.1563		0.08575	0.055642	0.095848	5.4324	5
Kitsap		0.7188		0	0.476265	0.071703	4.05317	4
Mason		0.9688		0.001525	0.106226	0.046095	3.08257	3
Pacific		0.4063		0.581975	0.042023	0.28608	4.59584	5
Pierce		0	1	0.05375	1.537938	0.028535	7.5339	7
Thurston		0.2813		0.1074875	0.463035	0.056338	2.25375	2
<b>Total</b>	<b>12</b>	<b>11.063</b>	<b>5</b>	<b>9.78309</b>	<b>12.47861</b>	<b>4</b>	<b>191.975</b>	<b>193</b>

## **CHAPTER VII. STAFFING AND DEPLOYING SUPPORT AND SUPERVISION**

This chapter focuses on staffing and deployment for:

- ❑ Patrol Field Supervisors
- ❑ Investigations
- ❑ Marine
- ❑ Aviation
- ❑ Communications
- ❑ Regional Staff Support
- ❑ Headquarters Staff Support

With the exception of Aviation, staffing and deployment of support and supervision is closely linked to level and deployment of WDFW patrol officers.

### **SECTION 1: FIELD SUPERVISION**

Sergeants serve as first line supervisors for WDFW patrol. Nationally, the ratio for patrol ranges from four to eight or more officers to one supervisor. The WDFW ratio ranges from three to six officers with the most common ratio being four to one.

The proportion of front line supervisors to officers is generally a function of:

- ❑ The average age and experience level of officers supervised. The WDFW work force in most areas is relatively mature and experienced. In recent years a number of younger officers have been recruited and placed in service.
- ❑ **Coordination Requirements.** The more coordination required among patrol officers, the more supervision required. WDFW patrol work is largely individual officer initiated.
- ❑ **Calls for Service.** The greater the proportion of calls for service, the greater the need for supervision to address citizen concerns and citizen request to see a supervisor. WDFW patrol addresses far more self-initiated work than calls for service.
- ❑ **Size of Work Zones.** Long distances require a tighter ratio to ensure adequate supervision. There are a number of locations in the WDFW environment where patrol distances are high.

In general, supervisors and officers find the current ratio acceptable. Concerns voiced by supervisors were directed mainly to the amount of administrative tasks required, not to the number of officers supervised. Interviews across the state with supervisors reinforced the geography and distance problems related to supervision. Unlike their city or county colleagues, WDFW supervisors cannot routinely co-respond to situations their officers encounter or initiate due to these distances. Thus they are, in some senses, unable to conduct direct individual officer performance oversight.

Several of the foregoing factors argue for a larger supervisory ratio. One, distances, suggests a more limited ratio. The IACP suggests an overall ratio of 5.5 officers per first line supervisor. This would permit areas where officers are more available to have a ratio of six to one and areas where officers are more dispersed to have a lower ratio.

Multiplying a patrol complement of 193 officers by a supervisory ration of 5.5 requires 35 sergeants, an increase of 13 over current complement of 22. Sergeants should be deployed regionally and to counties (or multiple county areas) where their officers are assigned. The current detachment system should be continued. Additional attachments should be added as needed.

## **SECTION 2: MARINE DIVISION**

Until this year (2008) the Marine Division functioned as a separate entity. Due to budget limitations, resulting in an unfunded captain position, the Marine Division detachments report to the captain of the region in which they are stationed. The marine detachments remain, however, committed to the marine mission. There are positives to integrating marine officers into a host region. When ocean or sound conditions are rough, marine officers can be easily reassigned to inland duties. Similarly when additional staff is needed for coastal duties inland officers can be assigned to marine functions.

On the average, however, the marine mission is sufficiently distinct and critical that marine functions would profit from the focused leadership of a marine captain. We recommend that a captain position be refunded to direct and coordinate marine operations, in conjunction with the two regional captains. The marine captain would also focus on long-term enforcement planning and interagency coordination.

## **SECTION 3: INVESTIGATIONS (SIU)**

All five investigators are housed on the west side of the state. SIU is directed by a lieutenant. Field officers note that they are unable to pursue many investigations due to

case complexity and the press of other duties. In addition, the ratio of detectives to officers is extremely unbalanced it is clear that additional detectives are warranted.

There are two basic approaches to staffing investigations units, workload and comparative. In the workload approach, caseloads are analyzed for closures (clearances) and average amount of time to process a case. To utilize this approach, a department must have explicit goals for specific types of cases that require investigation and historical data on the average time to complete the types of cases. Information of this nature is not available for WDFW investigations. It is impossible to assess staffing levels based on workload.

Since many police agencies do not have the quality and type of information needed for workload assessment, the comparison approach is the most common methodology used to estimate investigator staffing requirements. The comparison approach tracks the number of investigators in a department and establishes what proportion of the total sworn force are investigators. For agencies that employ at least one full-time or part-time sworn officer, Reaves and Goldberg (2000) estimate from a national sample of police agencies that about 15% of the full-time sworn personnel are assigned to investigative duties. Horvath, Messig, and Lee (2001) in their replication of some of the Rand's earlier work found, utilizing a sample of somewhat larger agencies, that 16.3% of total full time officers are assigned to investigations. Within these averages, there is considerable variability. Reaves and Goldberg (2000) did find that state law enforcement agencies, with the exception of those that are fully devoted to investigations, generally have a smaller proportion of investigators, closer to 10%. Current percentage of WDFW investigators to patrol officers is 5.8%.

An increase in the number of field officers will increase work for investigators. Using comparative methodology and a very conservative multiplier (10%) of the number of patrol officers, IACP recommends a staffing level of 18 detectives. To provide supervision an additional lieutenant is recommended. In this context it is significant to note that in 1993, the department had 17 detectives.

The west side-based SIU should be increased from five to eight detectives. An east side unit should be established and staffed by a lieutenant and four detectives. The additional, non-investigative duties currently performed by some SIU investigators should be reduced or eliminated to expand case workload of the unit. We further recommend that one detective position be assigned to each of the six regions to allow closer coordination between field officers and investigators, resulting in increased regional investigation activity, currently frustrated because of limited SIU staffing.

Investigative units generate considerable paperwork, require extensive files, and frequent transcription of interviews for presentation in court and to prosecutors. An administrative assistant with transcription skills should be assigned to each SIU unit.

The department should seek out and adopt a case management database system to supply, in a consistent state-wide format, case activity including hours worked, case resource expenditures (such as miles driven and buy money used), closure categories and documentation, progress reporting, and case investigative decision making (such as whether to investigate in the first place or when to stop, when resources expenditure exceeds case value). Collection of this kind of data in the future, coupled with case closure auditing capabilities, can further refine the staffing of the investigative function.

#### **SECTION 4: AVIATION**

The aviation unit is located on the west side of the state. Workload is modest and within the capability of the current staff. While we believe that more use of the aviation assets could be used for enforcement, there is no quantifiable data upon which to base any increase in staff or resources. The aviation unit should continue at the current staffing level.

#### **SECTION 5: COMMUNICATIONS (WILDCOMM)**

WildComm is located in the headquarters facility of WDFW in Olympia. WildComm acts as a mini centralized dispatch during its operating hours (currently limited to day work, Monday through Friday) and provides central information resources for in-person queries (via the lobby placed walk-up window in the DNR Office Building) and telephonic (via inbound telephone lines) and computer email and messaging.

WildComm services include providing information on license requirements, reporting nuisance and dangerous wildlife calls, reporting poaching and illegal fishing incidents, and servicing wildlife and natural resources use or abuse questions. WildComm could be developed into a one stop point for public communications of needs or information concerning the use of wildlife and fisheries resources in the State, as well as a centralized dispatch of those requests to field units. Currently, WildComm dispatchers do respond to requests for information and status (NCIC and other wanted checks or resource license verification) from field personnel when they are unable to communicate via their laptops due to signal coverage. They can still access WildComm via their radios and use that medium when the laptop/CAD signal is unavailable, or use their cell phones as appropriate.

Two factors limit WildComm's ability to serve as a one stop point of communication. WildComm does not have access to a Computer Aided Dispatch System. Without such a system WildComm cannot track and log calls and workload, a key responsibility of a communication center. Second, WildComm is currently staffed with two dispatchers. This limited staffing simply cannot provide the coverage or response that a single point of communications requires.

Given the shortfalls of the State Patrol Communications, and its cost, we recommend that WDFW Enforcement consolidate its communication functions into a single point of contact and make WildComm its centralized dispatch center for field officers. This requires the addition of staff and the purchase of a computer aided dispatch system.

Further recommending consolidation of dispatch is the potential ability of a single point of contact to reduce administrative demands on officers. To provide administrative accountability officers must enter information on their daily activities into a number of different systems. A centralized dispatch should reduce significantly a number of daily and weekly reports. A CAD automatically captures necessary information upon contact with the communications center.

We recommend that:

- ❑ Duties of WildComm be expanded to include centralized dispatch.
- ❑ Hours of operations for WildComm be increased to 15 a day, 7 days a week ( 6:00 a.m. to 9:00 p.m.).
- ❑ Six additional dispatchers be added to WildComm to address additional coverage and workload. Including unfilled positions, this would bring staffing to a total of eight.
- ❑ A computerized dispatch system be developed to log and track workload.
- ❑ The CAD should be configured to automatically collect data elements currently captured by other WDFW administrative information systems.
- ❑ A single statewide 800 number should be developed to permit easy access of Washington's citizenry to this dispatch center.
- ❑ Voice over IP should be considered to enhance communication and resolve a number of dead spots.

These actions should improve officer safety, enhance data collection, reduce reliance on a multiple communications methods, reduce the variety of un-logged calls, provide for better CFS workload data and future analysis, and provide one location for citizens to report complaints and observations, and obtain fish and wildlife information.

## **SECTION 6: REGIONAL STAFF SUPPORT**

In each region, officers perform tasks that do not require the skills or authority of status. These tasks should be addressed by civilian personnel, realizing savings in personnel costs and achieving greater efficiencies. For certain functions, civilian personnel are more efficient since they do not require the initial expensive training and continuing training to maintain commissioned status.

WDFW has recently civilianized the evidence function, creating two evidence technician positions. These technicians are assigned to Regions 1 and 6. Our review suggests, however, that there is not a sufficient volume of evidence to justify a full time position. At the same time, a number of other functions could be combined with the evidence function and addressed by a trained civilian. A position of a community service officer would be fully justified for each of the regions. Additional duties could include:

- Herding elk off of agricultural areas
- Responding to injured wildlife calls
- Responding to problem wildlife
- Conducting wildlife damage surveys
- Making public presentations
- Transporting paperwork and supplies
- Assisting with vehicle and equipment maintenance
- Performing a number of administrative tasks

We recommend that six community service officers be assigned, one to each region. They would assume the duties of evidence technicians and be assigned additional duties depending upon the needs of the specific region. This would result in a reduction

of two evidence technicians and an increase of six field aides, for a net gain of four positions.

## **SECTION 7: HEADQUARTERS' STAFF SUPPORT**

The Enforcement Program has wisely deployed most agency personnel to regions. Headquarters staffing is sufficient only for current administrative workload. Hiring of the additional staff proposed in this report will require additional resources to address added administrative workload. It is recommended that an additional civilian position of training/personnel coordinator be assigned to Headquarters.

The increase in staffing and functions recommended for communications and CAD will require analytic support. The Enforcement Program would also profit from increased coordination and analysis of their information systems. We recommend that an information specialist position be created and assigned to Headquarters. This position would be responsible for coordinating management information from the regions, extracting information from both EARS and CAD for regular management reports, special information requests. This position would also coordinate information resources with the regional administrative assistants. This specialist would also coordinate the external databases and related data needed to continue annual evaluations of staffing levels, as well the multitude of data needed by enforcement personnel.

It is recommended that as commissioned staff increases are fully realized that one additional equipment mechanic and one additional supply technician positions be established to address additional workload.

## **SECTION 8: ADMINISTRATIVE WORKLOAD IN THE REGIONS**

The regions currently have little or no administrative assistance to support activities. Duties fall largely on field officers and supervisors. Officers in the field frequently reference the amount of paperwork that they have to address. While we did not find the administrative duties excessive, administrative tasks consume a considerable proportion of a field officer/supervisor's day.

An increase in the capabilities of WildComm with additional staff and the support of a CAD will reduce field administrative duties by tracking calls and officer responses, reducing the need for officers to fill out additional reports. It is also recommended that current reporting systems be coordinated or consolidated to reduce duplicate entries by field officers.



While both of these elements will moderately reduce administrative workload, substantial reporting requirements will still remain. It is recommended that six administrative assistants be assigned, one to each region, to address information reporting, equipment inventories, supply request, travel vouchers, and the myriad of other reporting tasks that currently performed by field officers and field supervisors. These regional administrative assistants would work closely with the proposed informational specialist housed at headquarters.

**SECTION 9: OVERVIEW - PROPOSED STAFFING**

Table 6 summarizes proposed sworn staffing and then contrasts it with current sworn staff.

<b>Table 6</b>		
<b>PROPOSED STAFFING SWORN OFFICERS WDFW ENFORCEMENT PROGRAM</b>		
	<b>Sworn Staffing</b>	
	<b>Current Staffing</b>	<b>Proposed Staffing</b>
<input type="checkbox"/> Chief	1	1
<input type="checkbox"/> Deputy Chief	1	1
<input type="checkbox"/> Captain	7	7
<input type="checkbox"/> Lieutenant	5	6
<input type="checkbox"/> Sergeant	22	35
<input type="checkbox"/> Detective	5	18
<input type="checkbox"/> Officer	96	193
<b>TOTAL</b>	<b>137</b>	<b>261</b>

<b>FULL TIME CIVILIAN STAFFING WDFW LAW ENFORCEMENT PROGRAM</b>				
<b>Title</b>	<b>Headquarters</b>		<b>Regional</b>	
	<b>Current</b>	<b>Proposed</b>	<b>Current</b>	<b>Proposed</b>
Administrative Assistant	3	2	0	6
Accreditation Manager/Budget	1	1		
Management Analyst 1	1	1		
Information Specialist	0	1		
Criminal Justice Legal Liaison	1	1		
Tech/Radio Coordinator	1	1		
Communication Officer	4	8		
MA 5 (Hunter Ed)	1	1		
COEES (Hunter Ed)	3	3		
CSS (Hunter Ed)	1	1		
MA 3 Training	1	2		
CSS (Training)	1	1		
Supply Control Tech	1	2		
Equipment Tech	2	3		
Pilots	3	3		
Community Service Officers			0	6
Evidence Technicians	—	—	<u>2</u>	<u>6</u>
<b>Total</b>	<b>24</b>	<b>31</b>	<b>2</b>	<b>12</b>
Total Proposed Civilian Staff of WDFW Law Enforcement Program				<b>45</b>



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