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Maine's Recovery of Recreational Damages Due to Coastal Oil Spills

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August, 2005

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Disclaimer

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Glossary

Headings within Tables

Resource	Coastal resource with potential impacts in the event of an oil spill
Region	The Maine Office of Tourism identifies four coastal regions DE – Downeast & Acadia MID – Midcoast GP – Greater Portland & Casco Bay SME – Southern Maine
#	The # of sites of each coastal resource located within each region
Avg Users/Day	The average usage rate per day is calculated by dividing the seasonal usage rate by the number of days in the resource’s season
Data	The # of sites for each resource that have available usage data
No Data	The # of sites of each resource that did not have available data
Method	The method used to track usage data
Avg Daily/Fee	The average daily fee charged for one user of the coastal resource

Resources

State Historic Sites	Historic sites listed under the Maine Bureau of P&L
State and National Parks (Day Use)	Coastal state and national parks under the Maine Bureau of P&L and the National Park Service
State and National Parks (Overnight Use)	Coastal state and national parks under the Maine Bureau of P&L and the National Park Service providing camping services
Public Islands	State-owned islands within the MITA directory
Public Beaches	Coastal public beach sites that are not categorized as a “state park”
Boat Access	Sites (moorings) subject to the tide and accessible by boat such as land property (crossing areas), private and commercial wharfs, marinas, boat yards, and yacht clubs
Sea Kayaking	Sea kayaking businesses located along coastal Maine
Boat Tour	Whale watching businesses, boat tours, sea charters, and ferries
Shore Fishing	Recreational fishing from a pier, dock, wall, breakwater, bridge, causeway, beach, or bank
Charter Fishing	Recreational fishing from a boat that is operated for a fee by a captain; fishers are part of a group
Private Fishing	Recreational fishing from a boat belonging to or rented, and operated by fisher

Abbreviations

DB	Database
CEI	Coastal Enterprises Inc. study
MITA	Maine Island Trail Association
MRFSS	Marine Recreational Fisheries Statistics Survey
Bureau of P&L	Bureau of Parks & Lands
CG req	Coast Guard requirement
N/A – Not Applicable Data	
U – Unavailable Data	

Executive Summary

Tourism, the largest section of Maine's marine economy, is highly susceptible to economic damages related to coastal oil spills. During the last 33 years, Maine has suffered two coastal spills of greater than 100,000 gallons (Tamano and Julie N). The 2004/2005 fall/winter season faced three major oil spills in United States waters including a ship canal in Chicago joining the Mississippi River to the Great Lakes, the Delaware River, and the coast of Alaska.

The 2003 Energy Information Administration's petroleum import data indicates that the Portland oil port is the largest in Maine and the third largest in New England with a total volume of nearly 23 million barrels (nearly 1 billion gallons).¹ A typical oil tanker docked at this port has a capacity of 80,000 to 100,000 tons of cargo (over 20 million gallons), thus creating potential for even larger spills.

Pursuant to the Oil Pollution Act of 1990, responsible parties are liable for economic damages for "lost use" of natural resources. Many claims require valid, reliable data to document this lost use. Lack of such data leads to lengthy and costly legal proceedings, and delays in restoration. One of the basic steps in calculating economic, as opposed to biologic, damages from an oil spill is the need to identify the recreational use of coastal resources before a spill occurs. This study is a first attempt to collect and assess usage data for Maine's coastal resources that are potentially vulnerable to harm from a coastal oil spill.²

The report identifies 729 recreational sites across eleven coastal recreational resources or activities (herein noted as "coastal resources") that have the potential to be directly impacted by a possible oil spill. Analyses include an evaluation of the availability of usage data and direct market values.³ We gathered data from primary and secondary sources, private companies and public officials. Our research has identified data both readily available and unavailable for these economically important coastal resources.

Table 1 summarizes average daily usage rates, which were calculated by dividing the average yearly usage by the number of usage days available to users (i.e., the number of days a state or national park is open per year) and are given in units of persons. Usage ranges as a regional average from 0.71 (for public island usage) to 2,501 (for public beach usage) persons per day. We collected information, where available, on fees to use or access coastal resources. Direct charges to an adult for a full day of use range from \$0 to \$330, depending on the coastal resource. We calculated average daily revenues by multiplying the usage data with the daily fees. Several coastal resources have daily revenues of \$0, while others reach up to \$220,550 (for a boat tour). On average, boat tours, public beaches, and state and national parks are the highest revenue generating resources, respectively. Current data for some resources do not exist. Data are contained in the attached appendices and in our database.

¹ Petroleum imports include crude, asphalt, and unfinished oils; propane, kerosene, and motor gas; and jet and residual fuels

² Small spills also occur inland as the result of accidents such as over-turned trucks.

³ Secondary losses (profits) are also compensable to private parties.

Table 1: Average Daily Usage Rates of Coastal Resources per Site

Resource	Downeast & Acadia ⁴	Midcoast ⁵	Greater Portland ⁶	Southern Maine ⁷
State Historic Site	U	452.02	N/A	395
State and National Parks (Day Use)	1460.90	445.78	388.61	384
State and National Parks (Overnight Use)	195.01	77.50	N/A	N/A
Public Islands	0.72	0.71	4.88	N/A
Public Beach	65.79	121.71	50.61	2500.64
Boat Access	184	469.75	601.50	472
Sea Kayaking	U	U	U	U
Boat Tour	U	U	U	U
Shore Fishing	3.96	5.44	5.11	4.68
Charter Fishing	11.50	7.77	9.25	8.18
Private Fishing	3.75	4.62	5.63	5.03
<i>Source: Daily averages of available data provided by Data Sources</i>				
<i>*U indicates data is unavailable</i>				

This report includes a discussion on data limitations and aspects of the data that may strengthen or weaken its applicability for use in the valuation of economic losses. The extent of economic loss to recreational sites is dependent upon daily usage rates, the value people place on the activities or resources, the number of days impacted, and the time of year. For many coastal resources, there is limited systematic collection of use data. Moreover, the use and access of most coastal resources does not occur through well-defined markets. For example, fishers do not directly pay a fee to enjoy a day of shore fishing, but there is a substantial non-market value to them. Such values are often omitted from legal compensation because they are very difficult and costly to quantify. To the extent that fees have a consistent relationship to the value people place on the use of or access to coastal resources, our data can indicate where the greatest economic losses may occur. Quantifying actual losses requires economic analyses such as benefit transfers and contingent valuation studies, which are beyond the scope of this report.

Improvements can be made to fill in the baseline gaps by providing incentives to track data. Based on the likelihood of a coastal oil spill in Maine and the existing gaps in usage data, it is worthwhile for the state to invest in the collection of usage data beyond what is documented in this report. The foresight to present strong data may help to settle claims more quickly. Additionally, state, municipal, and other agencies may want to increase data collection procedures as part of their normal course of business. This would not only be helpful if there were an oil spill, but may help document which coastal resources are most heavily used such that their management and contribution to the economic well-being of Maine can be enhanced. The end goal is to ensure that, in the event of a spill, there is clear and known baseline data as well as an identification of any limitations. The

⁴ Downeast & Acadia – Includes Hancock and Washington counties

⁵ Midcoast – Includes Knox, Waldo, Lincoln, and Sagadahoc counties

⁶ Greater Portland & Casco Bay – Includes Cumberland county

⁷ Southern Maine – Includes York county

advantages of baseline data such as timeliness in the event of a spill can only be realized if the appropriate data are maintained; thus it is recommended that resource managers work toward this goal.

1. Background and Rationale

Tourism is the largest section of Maine's marine economy and could potentially suffer economic damages related to coastal oil spills. During the last 33 years, Maine has suffered two coastal spills of greater than 100,000 gallons. The first was from the Tamano tanker in 1972, followed by the more recent Julie N spill of 1996. During the 2004/2005 fall/winter season there were three major oil spills in United States waters. These waters were a ship canal in Chicago joining the Mississippi River to the Great Lakes, the Delaware River, and the coast of Unalaska. The 2003 Energy Information Administration's petroleum import data indicate that the Portland oil port is the largest in Maine and the third largest in New England with a total volume of nearly 23 million barrels (nearly 1 billion gallons).⁸ A typical oil tanker docked at the South Portland port has a capacity of 80,000 to 100,000 tons of cargo (over 20 million gallons), thus creating potential for a large spill. Lack of valid and reliable data leads to lengthy and costly legal proceedings, and delays in restoration.

Oil that spreads through the marine environment can result in very severe ecological and economic damage. The most visually dramatic ecological effects are the oiling of seabirds and the coastline. Just as ecologically important are the toxic and smothering effects that impact levels of the food chain, affecting species from microorganisms to mammals. Fish spawning areas may be damaged, and fishing areas may have to be closed to allow for oil cleanup and containment activities. Shellfish can be killed from smothering or otherwise be rendered worthless when a spill contaminates the areas where they are harvested. In addition, coastal oil spills have the potential to impose very large costs on Maine's marine economy. The Maine Development Foundation noted in a 1999 report for the Maine Department of Transportation that, "tourism related expenditures in Maine totaled \$4.9 billion in 1998." While precise figures are not available, ecotourism along Maine's coast, including sea kayaking, whale watching and cruising, has been growing steadily (Springuel, 2000). Maine also boasts the largest coastline on the East coast (4,568 miles) and is home to 4,613 islands (Maine Office of Tourism, 2004), which increases the value of Maine's coastal resources, as well as the challenge of maintaining baseline data.

One of the basic steps in calculating economic, as opposed to biologic, damages from an oil spill is to identify the recreational use of coastal resources before a spill occurs. This report is a first attempt to collect and assess usage data for Maine's coastal resources that are potentially vulnerable to harm from a coastal oil spill. The National Oceanic and Atmospheric Administration (NOAA) conducted the first attempt at collecting data on marine recreational resources from 1994-1995. The "National Survey on Recreation – Coastal Recreation Participation" was published in 2000 and presents total numbers of participants per coastal recreational activity in Maine.⁹ There is, however, no breakdown of these data by town or by recreational site. Currently there is no systematic

⁸ Petroleum imports include crude, asphalt, and unfinished oils; propane, kerosene, and motor gas; and jet and residual fuels

⁹ <http://marineeconomics.noaa.gov/NSRE/welcome.html>

identification of recreational resources and no comprehensive documentation of recreational use rates. Moreover, the value of these resources are not available for activities along Maine's coast. The Maine DEP has a set of environmental vulnerability maps showing wildlife and fisheries habitat, as well as the locations of recreational resources. There are, however, no recreational usage data represented in these maps. After speaking with the DEP, they informed us that they are "in the midst of updating the maps, and hopefully including this kind of information." Revenues for recreational activities are often available from town offices, but these figures are not segmented by resource or activity, or by site. This paper attempts to develop baseline usage data to facilitate economic assessments of recreational resources for the State of Maine.

Determining losses from oil spills is difficult due to both methodological and data challenges. Documented recreational losses in the Pre-assessment Data Report from the Julie N spill of 1996 in Portland concluded that, "This study underestimates total lost use because it focuses only on direct impacts for which at least some measurable data exists." (Reilly, p.29). While it is possible to go out and measure use after the spill, data on pre-spill use is often not available or is not maintained in a manner that is that easily and readily accessible for damage assessments.

Even though very few natural resource claims related to oil spills have gone to court in the past, the foresight to present strong data may help to settle claims more quickly if they arise. Two basic types of baseline data are needed to assess damages: socio-economic and ecological. Meetings with various state agencies involved with response efforts suggested the largest gap is in the existence of socio-economic baseline data. Ecological data are collected by various private and public agencies as well as by response teams following spills for assessment of damages and monitoring restoration efforts.

Legal compensation following an oil spill requires assurance of data that are both available and systematically collected according to current scientific standards. It took two full years for the pre-assessment of the Julie N to be completed due to a lack of baseline data for the activities affected by the spill. The current report is a first attempt to collect and assess uses of public recreation sites and to determine their vulnerability to direct impacts from a coastal oil spill. The goal is to document current and available baseline data, which identifies limitations and data gaps to support the planning stages of preparing for a coastal oil spill in Maine. In the event of a spill, up-to-date baseline data on the value and use of recreational sites may facilitate more timely and efficient compensation and restoration processes.

Public coastal resources are held in trust by the State as natural resources that provide public enjoyment. Federal and State resource management agencies and tribal authorities may recover damages from an oil spill as trustees on behalf of the public. Both state and town level resources are included in the recreational sites for this report, while private resources are omitted because of variations in the regulations for compensation. The Department of Environmental Protection (DEP) administers a program for third-party damage claims resulting from oil spills. Any person suffering damages as a result of a coastal spill may apply to DEP for compensation. With up-to-date baseline data on the

value and use of recreational resources, compensation and restoration processes may be conducted more quickly and efficiently.

2. Federal and State Legislation and Regulations

Maine is one of six Coastal States in which private ownership of the intertidal land is allowed. The state holds all intertidal lands (including privately owned land to the low water line) in trust for the public through the public trust doctrine, defined under English common law and the common law of most states as “recognizing the right of any person to use navigable waters for fishing, fowling, and navigation”(Christie et al. p.41). The doctrine empowers the state to recognize common law uses, but this has not stopped the controversy between public beach goers and private landowners. This is especially important since approximately 97% of Maine’s coast is privately owned with only 27 miles of publicly owned sandy beaches (Kelley et al., p.105).

Legal claims against the responsible party of an oil spill for recovery of economic loss may involve state and federal agencies, tribal governments, and private parties. Federal and state laws may apply, depending on the resources impacted. Following the 1967 Torrey Canyon oil spill off the coast of England, the US Congress began to consider prevention of oil spills, clean up of spills, liability, and compensation for pollution damages. The National Contingency Plan (NCP) was developed and published in 1968 to provide national response and coordination for potential spills in US waters. In 1973, Congress revised the NCP in the amendment of Section 311 of the Clean Water Act, to require a framework for responding to oil discharges, in addition to hazardous substances.

In 1989 the Exxon Valdez hit a reef in Prince William Sound and spilled millions of gallons of oil. As a result, the Oil Pollution Act (OPA) was signed into Congress in August 1990. OPA states that responsible parties are liable for economic damages for “lost use” of natural resources caused by an oil spill. OPA (Public law 101-380) amended the Clean Water Act (Section 311) with the goal of establishing limitations on liability and a compensation fund for damages resulting from oil pollution. OPA defines natural resources under Section 1001.20 as “land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources belonging, to managed by, held in trust by, appertaining to, or other wise controlled by the United States (including the resources of the exclusive economic zone), any state or local government or Indian tribe, or any foreign government.” The Act provides the primary basis for federal authority over natural resource damages and is therefore, a crucial component in determining the economic assessment of damages.

States may sue the responsible party on behalf of the public when it is in their best interest through police power.¹⁰ Private parties can sue for damages if proof of injury exists including property interests, economic loss, and corrective damages (Peck, p.12).

¹⁰ Police Power is the government's right to impose laws, statutes and ordinances to protect the health, safety, and welfare of the general public.

In Maine, the Marine Oil Spill Contingency Plan was adopted by the Legislature in 1991 (Section 5.1). This plan is incorporated in the Code of Federal Regulations (40 CFR 300) as part of the NCP required by OPA. It uses a three-tiered approach in which the Federal government is required to direct all public and private response efforts; federal, state, and local government officials develop detailed Area Contingency Plans; and both terminal and vessel owners prepare facility plans as required by OPA (Public Law 101-380, Section 4202).

In October 1991, the President issued Executive Order 12777 (implementing OPA) which gave authority to the United States Coast Guard (USCG) for spills occurring in coastal waters and gave the Environmental Protection Agency (EPA) authority for spills occurring in inland waters. All state contingency plans must comply with the USCG, and EPA guidelines consistent with the NCP.

2.1 The Economic Impact Assessment

NOAA is the primary trustee for coastal natural resources. Trustees for natural resources are designated federal and state agencies that act on behalf of the public to assess natural resource injuries. After the Exxon Valdez Spill, NOAA created the Damage Assessment and Restoration Program (DARP). The program uses a multidisciplinary framework with federal, state, and tribal trustees and is responsible for quantifying losses and evaluating restoration options. DARP has three offices within NOAA including:

1. Damage Assessment Center (DAC) – located within the National Ocean Service under the Office of Response and Restoration
2. Restoration Center – located within the National Marine Fisheries Service under the Office of Habitat Conservation.
3. Office of General Counsel for Natural Resources – located within the NOAA Office of General Counsel

The Department of Interior uses procedures outlined in the Natural Resource Damage Assessment Regulations under 43C.F.R. § 11.10. The Natural Resources Damage Assessment is composed of three phases: the pre-assessment, assessment, and post-assessment. These phases determine the extent of injuries and measure the compensable damages. The following steps are used throughout the assessment phases.

1. Establish a baseline - identify key issues and data sources
2. Estimate impacts - evaluate changes
3. Identify how to respond - weigh available mitigation and compensation
4. Evaluate how to respond - recommend mitigation or compensation
5. Monitor - evaluate effectiveness and make adjustments

2.1.1 Baseline Data

“Baseline data” is defined under OPA §990.30 as “the condition of the natural resources and services that would have existed had the incident not occurred. These data may be estimated using historical, reference, control, or incremental data types.”

Under the 2000 EPA Guidelines for Economic Analysis, the baseline must be appropriate for the question or policy option addressed, identify the point in time from which point effects of the policy are to be assessed, and define assumptions about underlying conditions or factors that are unknown or uncertain (EPA Guidelines, p.26). The guidelines note “the honesty and integrity of the analysis depend on the ability of the analyst to provide well-defined and defensible choices in the selection and estimation of baseline conditions.” (EPA Guidelines, p.21).

The allotted time for natural recovery must also be estimated in the assessment. Services lost are generally quantified by defining the time and extent of injury and by the change in resources from the baseline. However, in practice, recreational baseline data and usage rates are often missing or unidentifiable rendering the assessment incomplete.

Coastal resources (as defined for this report) within the State of Maine include parks, beaches, historic sites, recreational fishing sites, boat tours, sea kayaking sites, boat access sites, and islands. Our inventory of data indicates that current and systematically collected baseline data exist for only some of these resources. Data for most coastal resources are limited as discussed in detail in Section 5.

2.1.2 Evaluating Economic Loss

Measuring the damages from an oil spill is a challenging task involving identification of the damaged resources, the degree of impact, the restoration feasibility, and the determination of those resources that cannot be restored within a given time frame. The amount of natural resource damage under 33 U.S.C. 2706(d) and under Section 1006 of OPA include the following:

1. The cost of restoring, rehabilitating, and replacing or acquiring the equivalent of the damaged natural resources;
2. The diminution in value of those natural resources pending restoration;
3. The reasonable cost of assessing those damages.

When quantifying the extent of the damage or loss, it is important to know all of the determining factors. Some of these include, but are not limited to weather, season, distance from the spill site, characteristics of the resource, and the type of oil spilled. Also noted within the Oil Spill Contingency Plan are the characteristics which may affect the extent of the damage, as listed in Table 2.

Table 2: Characteristics Determining Extent of Injury or Loss

Nature of the spill
Physical and chemical properties
Spreading of oil on water
Oil weathering process
Movement of oil on water
Containment of oil
Mechanical recovery of oil
In-situ burning
Chemical and biological countermeasures
Dispersants
Herding agents
Airspace restrictions
<i>Source: Section 7.3 Marine Oil Spill Contingency Plan</i>

Economic losses discussed so far are based on the loss of use of market services. OPA also allows for the inclusion of non-market services along with direct or indirect use when assessing natural resource damages and rejects using the commercial value alone. Non-market services do not have an observable monetary value (i.e., beach visitation). Non-market values include both the value of use to society (use value) and the value beyond usage (non-use value). Such non-use values may include existence values and are commonly measured by consumers’ willingness to pay.

NOAA has issued detailed rules for the assessment of natural resource damages resulting from oil spills including methods of contingent valuation for the calculation of non-use values (15 C.F.R. pt. 990). In practice, however, non-market values have not been widely used. The National Ocean Economics Program states, “without these estimates of non-use values resources may be undervalued and decisions regarding their use may not reflect the true value to society.” (N.O.E.P., p.1).

Table 3: Methodology Summary

Method	Under/Over	Advantages	Disadvantages
Market Valuation	Underestimates	Measured by price	Does not capture existence values
Replacement or Restoration Cost	Overestimates	Directly values harm with all measures including existence value	Does not directly measure the value of the damage Technical difficulties
Contingent Valuation	Underestimates and Overestimates	Uses simple surveys to ask the public willingness to pay Direct method Includes existence value	Hypothetical Can not be validated Responders may not have sufficient information Problems arise with design of surveys
Behavioral Use Valuation	Underestimates	Measures welfare Less prone to error Easy to obtain data	Does not capture non-use values or opportunity costs
<i>Source: Peck, 5</i>			

Table 3 summarizes Peck’s findings of both advantages and disadvantages for each methodology used to assess natural resources damages. Controversy of methods for the valuation of natural resources remains an important concern for many interest groups and researchers. For example, Penn suggests in *A Summary of The Natural Resource Damage Assessment Regulations Under the United States Oil Pollution Act*, that in the absence of market valuation methods, behavioral valuation is often rated the second best tool. Existing studies using the contingent valuation method have transferred values over to determine dollar figures for recreational uses such as beach recreation. Choosing the appropriate methodology in damage assessment involves the professional judgments of economists, lawyers, and natural resource trustees.

2.1.3 Compensation

Under OPA 33U.S.C. § 2702, the responsible party is liable for the removal costs and damages in Subsection (b)(2) of 2702; Table 4 lists and defines these damages.

Table 4: Compensable damages pursuant to OPA

Type of Damage	Definition
Real or Personal Property	injury to or economic losses, which shall be recoverable by the owner or lessee
Subsistence Use	injury to, loss of, or loss in use of natural resources, which shall be recoverable by the user without regard to ownership
Revenues	net loss of taxes, royalties, rents, fees, or net profit shares due to the injury, destruction, or loss of real property, personal property, or natural resources, which shall be recoverable by the Government of the United States, a State, or a political subdivision
Profits and Earning Capacity	loss of profits or impairment of earning capacity due to the injury, destruction, or loss of real property, personal property, or natural resources, which shall be recoverable by any claimant
Public Services	net costs of providing additional public services during or after removal activities, including protection from fire, safety, or health hazards, caused by the discharge of oil, which shall be recoverable by a State or political subdivision of a State
<i>Source: OPA 33U.S.C. § 2702, Subsection (b)(2)</i>	

OPA establishes an Oil Spill Compensation Fund to compensate various victims of activities associated with the spill and to support unsettled claims. Coastal businesses suffering indirect economic injuries as a result of the spill may be compensated pursuant to OPA if it is determined that the loss of profit is due to one of the previous listed damages. OPA 33U.S.C. 2718 and §2752 states that it is “not the exclusive remedy for recovery of state clean-up costs or other damages associated with an incident covered by OPA.” States may impose further liability upon the responsible party. Under OPA Section 1018(b), States may set up funds to pay for costs or damages and require any person to contribute to this fund. States may also impose additional liability and requirements such as penalties or fines in relation to the spill.

2.1.4 Limited Liability

OPA states in 33U.S.C. § 2703 that limited liability defenses may result if the responsible party falls within one of the following categories:

1. Reports the spill upon first awareness;
2. Cooperates with officials responsible for removal of the oil;
3. Complies with Section 311 clean-up order;
4. Exercises due care with respect to the handling of the oil;

The responsible party is not liable for removal costs or damages if evidence proves that the damages or removal costs were caused by one of the following:

1. An act of God;
2. An act of war;
3. An act of a third party (not in a contractual relationship with the responsible party), and if the responsible party took into consideration the circumstances of the oil and took precautions against the foreseeable acts of the third party.

According to 33U.S.C. § 2703, these exemptions do not apply if the responsible party fails to report the incident or fails to provide reasonable cooperation for removal of the oil. Reporting cannot be criminally contested, but can be used in a civil hearing. This gives the responsible party the incentive to report.¹¹

Under 33U.S.C. § 2704 and Section 1004(a) of OPA, liability expenses shall range between \$500,000 and \$10,000,000 for most cases depending on the circumstances. The maximum for onshore facilities is \$350,000,000 and for offshore it is \$75,000,000 plus clean-up costs. These limitations do not apply to a responsible party who fails to report or refuses cooperation of removal of the oil.

¹¹ Criminal law ensures the punishment of the responsible party in the form of a penalty such as imprisonment and/or fines, while a civil law ensures individual compensation.

3. Cases - Lessons Learned

Previous cases of coastal discharges can offer guidance into the types of recreation to be assessed and what makes them useful in a legal setting. In addition, they help identify shortcomings or successes in states' regulations. We will review six cases of oil spills relevant to the discussion of asset identification covered in this report. Of importance, two previous oil discharges could have progressed to a legal judgment as to the magnitude of the economic loss while all other cases have settled out of court. In our view, this lack of litigation likely reflects the desire of both the responsible party and natural resource trustees to avoid arguing publicly over economic losses that are difficult to quantify precisely. We believe that better baseline data will generate timely liability claims that may result in faster settlements and allow for stronger cases in the event that courtroom intervention is required.

3.1 State of Idaho v. SRT (Southern Refrigerated Transportation)

First, we will consider the court findings on a discharge that occurred in December 1987, the State of Idaho v. Southern Refrigerated Transportation, Inc. (LN-Idaho v. SRT). This discharge entered the waters of the Little Salmon River in Western Idaho. Although not a coastal discharge, this case offers valuable lessons concerning states' rights to liability claims and baseline data.

One issue in this case was the interpretation of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulations. The defendant argued that the State of Idaho had no right to a claim without authorization from the federal government based on its interpretation of CERCLA Section 9604. However, the court found that states are within their rights to produce such claims as authorized by CERCLA under 42U.S.C. § 9607. (Case No.88-1279, 7)

Further, the defendant questioned the state's ability to restore the steelhead population (a subspecies of rainbow trout), which was the primary species at risk based on Section 9607 of CERCLA, specifying that funds received by the trustee of the resource, here the State of Idaho, must only be used to "restore, replace, or acquire the equivalent of such natural resources." The court again found in favor of the state based on expert testimony from the Department of Fish and Game claiming funds could be used to make improvements to the habitat.

With the right to the proposed liability claim, Idaho had to quantify the damages. Fortunately for the State of Idaho, annual estimated count data were collected by visual counts through electrofishing and snorkel surveys. Electrofishing is conducted from shore using an electric current to attract fish, while snorkeling surveys are done in the water as is suggested by the name. Both methods require a pre-established region or regions that are representative of the entire body of water. Fair comparisons can then be made to the remaining body of water to generate conservative counts. Although these data were originally collected to track population trends, it was found by the United States District Court for to be a defensible quantifier in this case.

The court next had to determine how these data could be applied to estimate the count of fish harmed at the time of the spill. The state suggested the use of central tendencies calculated by previous years of visual counts. The court disagreed, arguing that static data would be the more appropriate estimate, thus ruling to use summer counts from the same year. These counts were then adjusted downward to account for the seasonal differences from summer to winter populations, yielding a count of fish present in the water at the time of the spill. Extensive testimony and computer models were used to approximate toxicity levels at the time of the spill since no water samples were taken immediately following the spill. This information was then applied to the count data to estimate the number of fish killed.

With an estimated number of fish killed, the state then needed to establish the value of the fish. Idaho claimed damages should be measured based on three types of values: commercial, recreational, and existence. The court recognized all of these. Commercial values are use values that are often based on market prices. However, for this case no such market prices existed. Thus, the State of Idaho presented figures based on a publication by the American Fishery Society, which valued fish based on their per inch size and species classification. Defendants argued against these values since they were aggregated at the national level and thus would not yield an accurate value given the unique characteristics of Idaho steelhead. The court found in favor of the state.

Recreational costs are often associated more with transportation and accommodation expenses than with direct fees, and such is the case here. The state proposed a previous study by several federal and state agencies, part of which valued a recreational fishing trip and the value per fish caught for future water management practices and policies. The valuation technique used was a *travel cost model*, which is based on actual expenditures to get to a particular recreational site¹². The court agreed with the state's proposal and the study values were applied to the estimated number of non-returning fish.

Existence value is different than the previously discussed values in that it also allows for value by non-users. Thus while it is more inclusive, it may be more troublesome to quantify. The state presented a study that used the *contingent valuation method* to estimate the existence value of the entire Columbia River Basin¹³. The court found this study to be inappropriate stating, "it would be conjecture and speculation" to determine damages based on the study. The court clearly recognized the validity of existence value but when left with no other adequate measure, this particular value was excluded from the claims procedure.

¹² Travel Cost models are based on the concept that people will pay more for higher quality recreational experiences, by traveling to the higher quality sites. Travel models seek to capture the value of a site based on the travel expenditures people will make to reach the site.

¹³ Contingent valuation models employ survey methods to obtain values people place on resources when a market does not exist. Contingent valuation models seek to obtain value estimates for a resource based on the expenditures people are willing to make in order to maintain or improve the resource.

3.2 American Trader

In February 1990, the *American Trader* spilled nearly 400,000 gallons of oil off the coast of Huntington Beach, California. This case was the second to enter court with a liability claim, but the first natural resource damage case heard by a jury. This trial differed from the Idaho case in that it was not the economic theory behind quantifying the damages that was the question, but rather its empirical application.

Benefit transfer was the economic tool chosen by the trustee, here the State of California, to estimate the consumer surplus loss from the forgone recreational uses as a result of the spill.¹⁴ Identified uses quantified were: general beach use, surfing, private boating, party and charter boat fishing, whale watching and excursions to Catalina Island. Other recreational activities, such as wildlife viewing, running, rollerblading, hiking and biking were clearly affected but had no existing baseline data. Since it was initially anticipated that all defendants would settle on the claims proposed by the state, data for these other activities were omitted from the state's analysis. One defendant held out and the claim went to court. Considerable time and money were expended since both parties had to confirm previously estimated count methods and conduct primary valuation studies instead of the previously agreed upon benefit transfers.

The trial involved extensive disagreement in the number of estimated recreational trips and the value attached to a trip. The court decided to apply a 10% reduction to the estimate for lost beach recreation to allow for errors. An average consumer surplus across the three impacted beaches was used to value the resource, as opposed to marginal consumer surplus due to price rationing. (Heyes, p.17)

One common theme across these two cases is the continued reliance on expert testimony by federal and state agency officials, as well as by economists. As discussed later, even the cases where liability claims were settled out of court, expert opinions were employed and played significant roles in negotiations.

3.3 T/B Morris Berman

The T/B Morris J. Berman oil spill occurred on January 7, 1994 and was the first major spill following the OPA of 1990. The cause of the spill was due to a barge grounding on hard bottom rock and coral in a surf zone in San Juan, Puerto Rico.

The barge contained approximately 1.5 million gallons of Group V oil, which created many challenges for clean-up crews.¹⁵ Strong winds and heavy surf pounding against the

¹⁴ Benefit Transfer models are a non-market valuation technique used to estimate society's value for a particular good by transferring estimates from previous studies

¹⁵ Group V oil is "used primarily in the creation of oil additives, esters and polyesters are both, generally not used as base oils but add beneficial properties to other base oils, not aftermarket type oil additives, used in chemical engineering and blending or motor oils and other lubricating oils by the specific oil company that produces the finished product". www.performanceoiltechnology.com

vessel prevented proper booming of the spilled oil. Continuing oil leakage constrained clean-up crews, and on January 15th the barge was refloated and towed to a scuttling site where it was sunk. The Caribbean Regional Response Team (CRRT) and on-scene trustee representatives decided this decision was the best alternative with minimal impacts.

Impacts to natural resources were minimized through review processes involving the USCG, NOAA, and local and federal trustees. Guidelines were set for removal, actions, operations, and potential impacts. The risk of impacting shoreline along northwestern Puerto Rico was identified by trajectory analysis prior to the scuttling of the barge and proved to be accurate on February 3rd when impacts were noticed along 12 miles of shoreline (Petrae, p.2). NOAA noted that “using comprehensive information management and documentation during the spill response can enhance decision-making and ensure thorough, successful, post-spill reporting.” (Petrae, p.61)

3.4 Command

On September 24, 1998 Tanker Vessel M/T Command (Command) released 50 gallons of bunker fuel into the San Francisco Bay (also known as the “bay spill”). This Liberian-flag vessel, owned by Pearl Shipping and operated by Anax Corporation, was leaking fuel from a crack in the starboard fuel tank during a bunkering operation while anchored in the Bay. A third party promptly reported the discharge and the US Coast Guard announced completion of clean up the next day. However, on September 26, the Command departed the Bay while discharging approximately 3000 gallons of intermediate bunker fuel covering 15 miles of shorelines in San Mateo County, the Exclusive Economic Zone (EEZ) and the Monterey Bay National Marine Sanctuaries. This incident is also known as the “ocean spill” (not to be confused with the “bay spill”). Luckily, light winds and fair weather caused little movement of oil in the first few days.

The first problem with the “ocean spill” was the failure of the responsible party to notify the U.S. Coast Guard of the discharge. On September 30, oil washed ashore in the form of tarballs causing lethal and sub lethal injuries to California Brown Pelicans and Marbled Murrelets, which are protected under the Endangered Species Act. (Glazer et al., p.1). No existence value was attempted here such as was done in the Idaho case for the steelhead population.

An estimated \$47,108 in visitor lost use value and \$66,278 in diminished visitor use value totaled \$113,386 (Brown et al., p.1). Lost uses included decreased walking, jogging, swimming, surfing, tidal pool viewing, and picnicking from Montara State Beach to Bean Hollow State Beach (the affected area). The trustees in this case were the U.S. Fish and Wildlife Service, NOAA, the California Department of Fish and Game, the California Department of Parks and Recreation, and the California State Lands Commission.

These impacts focused on the valuation of losses to federal and state managed beaches and shoreline areas. Baseline use and visitation data or impacts at small beaches in the affected area were not available. Usage values per recreational activity were excluded

due to lack of available data. Methodologies included use of historical data and a *benefit transfer*. Aerial, boat, and shoreline surveys were also conducted to identify impacted resources.

The United States (on behalf of NOAA and DOI) filed a criminal action as a result of the spills (United States v. Pearl Shipping Corporation). The case was settled out of court with the California Department of Fish and Game, the California State Lands Commission, and the California Department of Parks and Recreation. The Consent Decree was reviewed by US District Court and required a payment of approximately \$5.5 million for all civil claims (Glazer et al., p.3).

3.5 Buzzards Bay Oil Spill

On April 27, 2003, the Bouchard Barge 120 (owned by the Bouchard Transportation Company) hit an obstacle in Buzzards Bay, Massachusetts spilling 98,000 gallons of No.6 oil. To date, the oil has impacted an estimated 90 miles of shoreline. Data is currently being collected for the assessment. The evaluation process involves surveying coastlines, collecting, and analyzing data, and examining recreational uses of the Bay. Potential impacts were identified for shoreline habitat, birds/wildlife, and recreational uses including beach use and boating. After sufficient information is collected, a public review and comment period will follow. Trustees including NOAA, the US Fish and Wildlife Service, and the State of Massachusetts are currently undergoing meetings with citizens, community and environmental groups, and local and regional officials.

3.6 Julie N

The Julie N oil spill of 1996 is considered the worst oil spill in the history of Maine's Portland Harbor. The nearly 180,000 gallon oil spill was the result of human error and the miscommunication of a steering command that led to the boat's striking of a drawbridge. According to Boggis, Hamilton, and Herz in *Threading The Needle*, this bridge "had been struck 79 times by ships, tugs or barges in the twenty years preceding the Julie N spill, which includes two incidents by the pilot of the Julie N." This record indicates that there was clearly a problem with regard to passage through the bridge. Boggis goes on to note, "data regarding threats to safe navigation apparently do not routinely flow to U.S. Coast Guard Marine Safety offices, to the shipping industry, or to the public and that many existing bridges do not fulfill the requirements of Ship Domain theory, because navigational clearances actually used are driven by concern for economy rather than collision risk considerations."¹⁶ (Boggis et al., p.67-68).

Boggis et al. note that in 33 U.S.C. 1223 and in Section 4 of the Ports and Waterways Safety Act, "the U.S. Coast Guard is responsible for assuring tanker and bridge safety and has the authority to approve clearances required for safe navigation through bridges."¹⁷ Further, they note that a Maine Department of Transportation bridge

¹⁶ "the maximum length of a vessel that can safely transit the navigational span" (Boggis et al., p.68).

¹⁷ In any port or place under the jurisdiction of the United States, in the navigable waters of the United States, or in any area covered by an international agreement negotiated pursuant to Section 11, may construct, operate, maintain, improve, or expand vessel traffic services, consisting of measures for

maintenance engineer expressed concerns about safety, but ‘was told by the Coast Guard that it was the ship captain’s responsibility to decide when it was safe to pass and he (the captain) was liable for the damages.’ (U.S. NTSB 1997, Exhibit 5-C, 10) (Boggis et al, p.69). It appears that conflicting information existed with regard to who held responsibility related to this concern. A captain may be relying on the engineers and the Ports and Waterways Safety Act for passage, while engineers believe the captain was the responsible party.

There were many procedural failures that occurred during the clean-up response of the discharged oil. The first is that priority was given to recapture the spilled oil for resale instead of on the placement of booms upstream (Boggis et al., p.15). These nearby sensitive areas were not protected until 8 hours after the spill occurred. The US EPA 40 C.F.R 300 regulation states that an immediate action must be taken to “control the source of discharge.” The Julie N Lost Use Valuation Report (herein referred to as the ‘Julie N Report’) states, “this delay cannot reasonably be considered ‘immediately upon the spill’s detection’ as required by the Area Plan (U.S. DOT 1996d, E-IV-E-3), and was a substantially longer period of time than contemplated in the Area Plan Scenario.” (Boggis et al., p.25). As a result of the delay, a valuable nearby marsh in the Upper Fore River was heavily covered with oil the morning after the spill. The final outlay included 13.65 miles of oily shoreline (of which 8 miles were marshland) with a 49-day clean-up process. The Maine Department of Environmental Protection estimated approximately 78.5 percent of the oil was recovered, although this information was not confirmed.

The Julie N Report documents loss of use in recreational activities as 250 lost trips and 2700 diminished trips for the Prince of Fundy Cruises Ltd., 1380 lost school trips, 4,862 lost trips for recreational fishing from marinas and moorings, 124 party/charter boat recreational fishing trips, 300 lost tour boat trips for secondary students, and 225 lost whale watching trips.

Recreational boat access closures varied in duration from a few days to six weeks. Loss of recreational boat users were adjusted according to weather conditions at the time of closure, since foul-weather days do not experience boating regardless of an oil spill. The Julie N Report states usage rate percentages for five boat access sites that were impacted by the oil spill. An average of these five percentages was used in this report’s data analysis section, yielding a usage rate of 44.3% of all boat access on any given day of the week. Using the same five boat access sites in the Julie N report, an average was calculated for the number of passengers per boat on any given day of the week. This average, of 3.2 persons, was then multiplied by the boat usage to find the average number of boaters per day. There were no available data to quantify the numbers of days lost for shore fishing or for passive or indirect uses such as wildlife viewing.

The total cost of the clean up was \$43 million not including the compensation to businesses and natural resources for damages. The pre-assessment, therefore underestimates lost use due to the Julie N spill (Reilly, p.4-29).

controlling or supervising vessel traffic or for protecting navigation and the marine environment and may include, but need not be limited to one or more of the following: reporting and operating requirements, surveillance and communications systems, routing systems, and fairways.

One common lesson from all of the cases presented in this report is the importance of identifying those factors that determine the extent of damages or loss. As stated earlier, some of these include, but are not limited to, weather, season, distance from the spill site, and characteristics of the affected resources. The following table summarizes some of the key points from the previous cases with regard to usage data and the importance of systematically collected baseline data.

Table 5: Summary of Cases

	Idaho v. SRT	American Trader	T/B Morris Berman	Command	Buzzards Bay	Julie N.
Season / Year	Winter / 1987	Winter / 1990	Winter / 1994	Fall / 1998	April / 2003	Fall / 1996
Recreational Resources Valued	Steelhead Fish	Beach uses, boat tours	Various	Beach uses	Beach use, Boating	Recreational uses
Usage Data Type	Annual counts from same year as spill	Count				Direct uses and values
Collection	Survey, visual counts			Surveys	Survey	
Methodology	Computer models, weather adjustments	Estimated counts, valuation studies, expert testimony	Reviews, impact studies, trajectory analysis	Historical data, benefit transfer of American Trader values	Analyzing recreational data	Adjustments for weather
Value Data	Travel costs, commercial values	Disagreement on values		Visitors per day		
Exclusions Due to Unavailable Data	Non-use values	Running, biking, viewing, hiking, non-use values	Non-use values	Usage values, non-use values, spill impacts		Shore fishing, passive uses, non-use values, indirect impacts
Result	US District Court Defensible quantifier	Disagreed on estimated number of trips	NOAA stated "thorough and successful post-spill reports"	US filed Criminal action, settled out-of-court	Ongoing	Underestimates
Other Notes		Case went to court		Focus of losses to federal and state beaches and shorelines	Meetings are scheduled with community members	Out-of-Court settlement
<i>Source: See Referenced Cases</i>						

4. Maine’s Tourism Industry and Economic Analysis

The Maine Office of Tourism estimates (from the 2002 Impact of Tourism on the State of Maine) that tourism contributes \$377 million in state and local taxes. This total included \$206 million in Sales Tax, \$106 million in Personal Income Tax, and \$66 million attributed to Gasoline Tax.

Table 6 summarizes data submitted by the Department of Economic and Community Development and the Maine Office of Tourism in 1997. It is important to note that this study is conducted only every five years and the 2003 data were not completed in time to present in this report. The coast is a particularly important tourism asset as more visits are made to all four coastal regions during the summer (July to September) than during any other season. The data suggests that Southern Maine is overall more popular for activities such as state beaches and shopping where Greater Portland & Casco Bay held the highest percentage for overall number of trips in Maine.

The analysis suggests that a larger degree of impact may occur on these resources in Southern Maine from a coastal oil spill. Portland is the third largest crude oil port on the East Coast and as such, it is more likely that a spill will occur in this region. Therefore, larger economic damage to Maine’s marine economy may occur in Portland, than any other region. More visits are made to all four coastal regions during the summer (July to September) than during any other season.

Table 6: Summary of 1997 Tourism Data (Number of Trips)

	Highest %	Lowest %
Overall No. of Trips	Greater Portland & Casco Bay	Downeast & Acadia
Beach	Southern Maine	Greater Portland & Casco Bay
Shopping	Southern Maine	Greater Portland & Casco Bay
Eating Local Foods	Downeast & Acadia	Greater Portland & Casco Bay
Out-of-state Residents	Southern Maine	Downeast & Acadia

Source: Department of Economic and Community Development, Maine Office of Tourism, 1997

5. Collection and Assessment of Resource and Activity Usage Data

This section compares data in each of four regions as defined by the Maine Department of Tourism. These regions include the following:

Region 1: Downeast & Acadia (DE)

Region 2: Midcoast (MID)

Region 3: Greater Portland / Casco Bay (GP)

Region 4: Southern Maine (SME)

We consider only those activities or direct resources within a potential spill site and do not consider secondary impacts. Secondary impacts or economic losses to businesses such as restaurants and hotels can be pursued as private claims. We focus on resources and activities, which were impacted in previous coastal oil spill cases. Identified coastal resources include those displayed in Table 7.

Table 7: Coastal Resource Definitions

Resource / Activity	Definition
State Historic Site	Historic sites listed under the Maine Bureau of Parks and Lands
State and National Park (Day Use)	Coastal state and national parks under the Maine Bureau of Parks and Lands and the National Park Service
State and National Park (Overnight Use)	Coastal state and national Parks under the Maine Bureau of Parks and Lands and the National Park Service providing camping services
Public Islands	State-owned islands within the Maine Island Trail Association directory
Public Beaches	Coastal public beach sites that are not categorized as a “State Park”
Boat Access	Sites (moorings) subject to the tide and accessible by boat such as land property (crossing areas), private and commercial wharfs, marinas, boat yards, and yacht clubs
Sea Kayaking	Sea kayaking businesses located along coastal Maine
Boat Tour	Whale watching businesses, boat tours, sea charters, and ferries
Shore Fishing	Recreational fishing from a pier, dock, wall, breakwater, bridge, causeway, beach, or bank
Charter Fishing	Recreational fishing from a boat that is operated for a fee by a captain; fishers are part of a group
Private Fishing	Recreational fishing from a boat belonging to or rented, and operated, by fisher
<i>Source: Definitions provided by Data Sources</i>	

The report identifies 732 recreational sites across eleven coastal recreational resources or activities that have the potential to be directly impacted if a spill were to occur. Analyses include an evaluation of the availability of usage data, direct market values, and daily revenues. Daily economic revenues are calculated by multiplying the daily fees for each resource by the daily usage rate. In the case of an oil spill, economic loss or damage of the resource may be evaluated by multiplying the number of days lost for usage by the estimated daily economic revenue.

We collected data using a number of sources including direct contact with local and state agencies via email and phone. Websites were used to collect daily usage rates of coastal resources and to retrieve contact information. Data were compiled from the detailed data

found in appendices B through L, each of which represents a coastal resource. It is important to note that many coastal resources, such as boat access sites, have one-time fees but do not indicate daily usage. In such cases, we note that seasonal fees do exist for various resources, but that daily observable fees, and usage, are unavailable from seasonal data.

The most recent data were used in the calculations of daily usage rates. State and national parks, historic sites, public islands, and public beaches had multiple years of data available and an average over the last four years was used to determine an average yearly usage value. It is important to note that the Bureau of Parks and Lands has records of usage data for both parks and historic sites by month for May-October and combined data for November & December and January through April. This data dates as far back as 1966, while the data for the other resources is more recent (only dating as far back as those years used in the calculations). Average usage values are presented in the attached appendices for each resource.¹⁸ Average daily usage is calculated by dividing the number of days a particular resource was open to public use into the average yearly usage value. For example, Quoddy Head State Park in the Downeast & Acadia region has an average of 89,986 users per year (averaged over four years of data) and the park is open for 154 days during the year. The daily usage rate for this park is 584 users. After daily usage values were calculated per site, an average usage value was calculated from the available data within each region so comparisons could be made.

The number of days open varied for most resources including state historic sites, state and national parks (both day and overnight use), and for the three modes of recreational fishing. No data were available on the number of days open for sea kayaking and boat tours, which is assumed to vary by business. It is assumed that boat access usage data would be consistent from day to day. The usage data available for the public islands is for the months of July and August only, thus the number of usage days is 62. Nearly all public beaches have the same number of days open (152 days) from mid-April to mid-October. Attached appendices include data on the numbers of usage days available for each resource or activity and also for each site. All daily usage values are averaged from all days of data in the year. Recreational fishing provided data during both weekdays and weekends, which was averaged for a daily usage value on any given day of the week.

Daily fees are taken as direct charges to an adult for a full day of usage. For some resources, such as state and national parks, both season and off-season rates were available. Other resources, such as public islands do not charge a daily fee. Daily fees were calculated as an average over all data existing for each of the sites in each region. For instance, Southern Maine has only one state park with daily fee data available. This daily fee is \$3 per user during the season and \$1.50 during the off-season, which is calculated as an average from all fees data available for that park. Many resources have seasonal one time fees, such as seasonal parking passes or mooring permits, which were omitted from the “daily fee” analysis used in quantifying economic loss. Other fees omitted from the daily fee analysis include senior rates, child rates, special event rates, and group rates. Average fees per region are calculated for regional comparison purposes.

¹⁸ The raw data is available by request.

5.1 State Historic Sites

There are 8 historic sites located along the coast of Maine that are accessible for public use. Usage data suggest that this type of resource is very popular for tourists at any time of the year. Data was provided in the Maine State Public Day Use Reports, which were submitted by the Bureau of Parks and Lands. These reports are comprised annually, but data is also available monthly from a systematic database. Data are collected in the form of head counts and there are four years of data (2001-2004) used in the calculations of average usage per day for this report. The 2004 State of Maine Travel Planner was used to gather data on the number of days open for each site.

Baseline usage values, fees, and estimated economic revenues are summarized in the following table. Daily fees were found from the Maine Bureau of Parks and Lands brochures. Detailed data, including usage and fees per historic site can be found in Appendix B. The Greater Portland & Casco Bay region does not have any state historic sites present.

Table 8: Historic Sites Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	U	\$0	\$0	\$0	\$0
Midcoast	452	\$2	\$1.20	\$904	\$542
Greater Portland	N/A	N/A	N/A	N/A	N/A
Southern Maine	395	\$1	\$0.75	\$395	\$296

Average values for daily usage indicate that on average, the Midcoast region has a higher usage rate and Southern Maine has the second highest daily usage. The daily revenue per site is highest for the Midcoast region than the other three coastal regions with an estimated \$904 on any day during the season and \$542 for any day in the off-season. This may be due to the higher average fees charged in this region than in the other regions. Based on daily economic revenue alone, if a coastal oil spill impacted a site in the Midcoast region, there may be greater economic losses than if it impacted Downeast Maine where usage is free of charge. Thus, \$0 in daily revenue is generated.

Two of the eight historic sites do not have usage data available since there are no staff assigned to the sites. One of these sites is the only one existing in the Downeast region and there is no charge for using that site. Although it is free and no revenue is generated, there is an associated historic and existence value that is not included in our analysis. This limitation is discussed later in the report.

5.2 State and National Parks (Day Use)

Data provided for state and national parks are presented in Appendix C and were made available by the Maine State Parks Public Day Use Reports, which were submitted by the Bureau of Parks and Lands. The 2004 State of Maine Travel Planner was used to gather data on the number of days open for each park.

There are 19 state and national parks located along the coast of Maine that provide day use for tourists and local residents. Usage data suggest that this resource is also very popular for tourists at any time of the year. The Bureau of Parks and Lands keeps a systematic database of day usage data on both a yearly and monthly basis. Data are collected in the form of head counts and four years of data (2001-2004) are used in the calculation of average usage per day for this report. Only Shackford Head State Park does not have available usage data due to budget constraints and the cutting of the Park Ranger position at this site.

The Director’s Order 82 (DO82) is found under 16 U.S.C. of the National Park Service Organic Act. It is a policy and procedure for collecting and reporting public use data. Methods used by the NPS include use counts, surveys, and electronic software to summarize and report usage data. Quality control checks in the form of desk audits and periodic reviews are used to eliminate errors. Duplication errors occur with commuter traffic passing through traffic counter points, visitor traffic going to and from their destination, and counting both day and overnight visiting twice. Valid and accurate data results from the conversion and correction factors used by the NPS. Conversion factors are determined by using random sampling designed surveys on public use factors such as length and type of visit. Notes are made on reports to indicate significant factors such as detours and closures. The public use reports are available to the public online.

Acadia National Park is the only coastal National park in this report and thus the only park under The Director’s Order. The data is categorized by month and dates as far back as 1919. The park uses traffic counters situated in Mt. Desert Island and Schoodic Peninsula. Counts are then multiplied by a vehicle expansion multiplier to estimate the number of vehicles using all other recreation areas of the park. The adjusted vehicle count is then multiplied by a persons-per-vehicle multiplier (PPV) for the final recreational use figure. Other methods include observed snowmobiles and skiers, and visitors by ferry.

Baseline usage values, fees, and estimated economic revenues for the four coastal regions are summarized in Table 9. Daily fees were identified from the Maine Bureau of Parks and Lands brochures and include season and off-season rates. There was little variance between daily average user rates across all regions except for Downeast Maine. This variance was caused by the inclusion of Acadia National Park, for which a higher fee is charged than other parks. Detailed data, including usage and fees per State and National Park (day use) can be found in Appendix C.

Table 9: State and National Parks (Day Use) Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	1,460.90	\$5	\$4.33	\$7,305	\$6,331
Midcoast	445.78	\$1.83	\$1	\$817	\$446
Greater Portland	388.61	\$3.17	\$1.50	\$1,232	\$583
Southern Maine	384	\$3	\$1.50	\$1,152	\$576

The data suggest that the Downeast region has a higher daily usage rate than the other coastal regions with an average of 1,461 users per park. This high usage rate yields the highest daily revenue across all regions at \$7,305 per day in the season and \$6,331 in the off-season. This high value may also result from the higher fee charged at Acadia National Park. The Midcoast region has the second highest usage rate, although Greater Portland & Casco Bay has the second highest daily revenue. We can see there are only minor differences in the usage data and revenues for both Greater Portland & Casco Bay and Southern Maine.

Among the coastal regions, the Downeast region may suffer a larger loss if a coastal oil spill were to occur on a state or national park (in the case of Acadia National Park) based on the usage data averages alone. State and national parks may have different parking passes and fees for residents and non-residents, but the usage data is not segmented by resident versus non-resident. Seasonal park passes are also available to users and there is no indication of what percentage of users are paying with daily fees versus seasonal fees. Users may also enter or exit the park via other means such as pathways or private entry points, thus avoiding the parking fee. As a result, if the number of users is to be collected through parking passes, this data may be underestimated. Although the scope of this report focuses on recreational resources at the state level, it is important to note that little usage data is available at the town level. Private campgrounds may keep track of daily usage in the form of seasonal revenues.

5.3 State and National Parks (Overnight Use)

As noted under the state and national parks (day use) analysis, this resource is a very popular experience for many visitors to the State of Maine. Data provided for State Parks (overnight use) are available by the Maine State Parks Public Day Use Reports, which were submitted by the Bureau of Parks and Lands.

Of the 18 coastal state and national parks (day use) indicated above, only five offer overnight use or camping facilities. Three parks are located in Downeast Maine and two are in Midcoast Maine. The Bureau of Parks and Lands also keeps track of these data within their database on an annual basis. Data are also collected using head counts and there are four years of data (2001-2004) used in the calculations of average usage per day (or night) for this report.

Baseline usage values, fees, and estimated revenues are summarized in the following table. Camping fees were found from the Maine Bureau of Parks and Lands brochures and include season and off-season rates. For this resource, both resident and non-resident rates were provided, but no records were available on the numbers of each so an average of the two rates was used. Acadia National Park offers camping year round, while all other parks are open for the same number of days (164). Detailed data, including usage and fees per State and National Park (overnight use) can be found in Appendix D.

Table 10: State and National Parks (Overnight Use) Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	195.01	\$24.67	\$19	\$4,810	\$3,705
Midcoast	77.50	\$17	\$11.50	\$1,318	\$891
Greater Portland	N/A	N/A	N/A	N/A	N/A
Southern Maine	N/A	N/A	N/A	N/A	N/A

The data suggest that the Downeast region has a higher daily usage rate than the Midcoast region with an average of 195 campers per park. Since it holds the highest average daily usage rate, it also has the highest daily revenue, on average, for both season and off-season months. We can conclude from the data that the Downeast region may suffer a larger economic loss from overnight use parks (in particular Acadia National Park) if a coastal oil spill were to occur in this region compared to in the Midcoast region.

The Bureau of Parks and Lands keeps a systematic database on the use of state parks. All overnight use parks within the sample had available usage data. State and national parks data may be underestimated due to the same limitations as stated in the analysis for day use.

5.4 Public Islands

The islands off the coast of Maine play an important role in the tourism industry. Islands are predominately owned by individuals and organizations and have the same legal protection as private property on the mainland. Data provided for this resource was made available by the Maine Island Trail Association (MITA) and are found in Appendix E. There are 45 public islands managed under MITA and the usage values reflect an average of data provided for four years (2000 to 2003). The data is available for visitors in the months of July and August only. There are no documented islands within the MITA data for Southern Maine. The Island Institute was also contacted with regards to usage data, but they do not keep record of such data.

Usage data for visitation are gathered on a random observation basis by volunteers of MITA. Logs are sent to members to record their own use and the use of persons they observe. Public island log books collect data on the number of visitors and how they traveled to the islands. One problem is that MITA does not know what percentage of users is signing in through this method of data collection. There is no known uncertainty factor associated with this method and usage numbers are most likely underestimated as a result.

Baseline usage values, fees, and estimated revenues are summarized in the following table. Access to all islands in the sample are free of charge, thus all fees and daily economic revenues are equal to \$0. Detailed data, including usage per island can be found in Appendix E.

Table 11: Public Islands Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	0.72	\$0	\$0	\$0	\$0
Midcoast	0.71	\$0	\$0	\$0	\$0
Greater Portland	4.88	\$0	\$0	\$0	\$0
Southern Maine	N/A	N/A	N/A	N/A	N/A

The data suggest that the Greater Portland & Casco Bay region has the highest average daily usage rate with 5 visitors per island. The Downeast & Acadia and Midcoast regions have very similar daily usage rates of .72 and .71 respectively. Assuming that island experiences along coastal Maine are valued equally, the data suggest that the Greater Portland & Casco Bay region may suffer the largest economic loss from a coastal oil spill.

Although there are no revenues collected for the use of public islands, the islands may be valued very highly by users. In addition, non-use values such as existence or aesthetic values for these islands are not readily available. To document such non-market values, research could be conducted in the form of a survey distributed to island visitors. There was only one public island for which usage data were not available by MITA. Although private resources are beyond the scope of this report, it is important to note that MITA manages 47 private islands off the coast of Maine for which there are no usage data available. These islands are available for use by MITA members only.

5.5 Public Beaches

Maine has only 27 miles of publicly owned sandy beaches (Kelley, 105). Usage data was compiled for 45 public beaches in Maine. Many of these beaches are not publicly owned, but rather enjoy a history of public use. These beaches are primarily located in Southern Maine and are especially valuable to the tourism industry. State beaches located within state parks are accounted for within the Bureau of Parks and Lands usage data. Data for other public beaches was provided by the Maine Shore Stewards and includes data from the Maine's Healthy Coastal Beaches Program and the 1999 National Health Protection Survey.¹⁹ These data can be found in Appendix F. The Healthy Coastal Beaches Program is fairly new and contact personnel indicated that they are still working for full cooperation at both the state and town level. Since this program only focuses on beaches suitable for swimming, usage data for non-swim beaches is unaccounted for.

The years of data available vary per beach and range from 1999 to 2004. Collection of data included a survey where responders would score beach conditions at specific beaches. The 2004 Maine's Healthy Coastal Beaches Program provides data only from Greater Portland & Casco Bay and Southern Maine. 1999 was the only year for which

¹⁹ The Maine Shore Stewards is a collaborative effort of organizations including the Maine Department of Environmental Protection, Maine Beach Profiling, the University of Maine Cooperative Extension, Maine Department of Marine Resources, and the Maine Coastal Program.

usage data for the off-season was available. These data were taken as an average for that year with the seasonal usage data. The number of days open for all public beaches is typically consistent at 152 days based on available data from several beaches.

Daily fees were obtained through phone interviews with municipal offices. There are no readily available data for daily fees within the Downeast & Acadia and Midcoast regions. Fees are distributed in the form of parking passes that are submitted either daily or seasonally. Few of the sampled coastal beaches provided free parking (taken as a value of \$0). Four beaches (all located in Southern Maine) have fees based on an hourly rate, so a daily fee was calculated based on a five hour day. These values are indicated in italics in Appendix F. Baseline usage values, fees, and estimated revenues are summarized in the following table.

Table 12: Public Beaches Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	65.79	U	U	U	U
Midcoast	121.71	U	U	U	U
Greater Portland	50.16	\$1.67	U	\$84	U
Southern Maine	2500.64	\$6.80	U	\$16,732	U

The data suggest that Southern Maine would suffer a larger economic loss for a public beach. This larger economic loss may be due to the higher daily fee and the number of valuable white sand beaches present here.

Currently, there are limited data available on the number of coastal beach users. The noted sources provided data for various beaches along the coast of Maine. However, many of the usage numbers were in very wide ranges, (e.g. 1-2 million+ users per season). Researchers from state agencies have indicated that it is very challenging to get accurate figures for beach usage. This challenge may be due to beaches with many access points giving users the option to avoid the daily fee and also due to the lack of a systematic method for tracking counts of persons at beaches.

Daily fees are based on a per vehicle basis and there is no record of how many coastal beach users are within each vehicle. Also, some of the sites such as Ogunquit Beach, have parking passes valid for multiple parking lots and/or for multiple uses (i.e., not just for use of the coastal beach resource). As a result, if the number of users is to be collected through parking passes, usage data may be over or underestimated.

Although the scope of this report focuses on recreational resources at the state level, it is sometimes difficult to segment ownership of public beaches from state to private. Consequently, it is important to note that data limitations are also occurring at the town level. There were three beaches in the Healthy Coastal Beaches Program that had usage data at the private or town level. Municipal officials indicated that beach usage is not currently tracked or recorded at the town level. However, towns that collect parking fees

for municipally-owned or managed beaches may at least be able to estimate the number of vehicles per season.

Contacts from the University of Maine Cooperative Extension indicated that they have asked for a systematic collection of beach usage data for years, but it still is non-existent. The Maine State Planning Office noted in *Improving Maine's Beaches*, that valuing state beaches would help public officials to make decisions on expenditures of public funds to protect and restore the resource. They have recommended in their beach management plans to work with municipalities and businesses to conduct a census of beach users and prepare an evaluation of economic value of beaches. To date, there is no information suggesting that such plans have been followed through. (Maine State Planning Office, 1998)

5.6 Boat Access

Appendix G presents data on the number of recreational boat access sites within each coastal region. Coastal Enterprises Inc. (CEI) prepared *Preserving Commercial Fishing Access – A Study of Working Waterfronts in 25 Maine Communities* for the Maine State Planning Office in 2002. CEI looked at two previous studies or databases on waterfront facilities and interviewed 90 municipal officials, waterfront committee members, commercial fishermen and harbor masters. An analysis of secondary development data (economic and demographic) and commercial fishing licenses was conducted to strengthen the data.

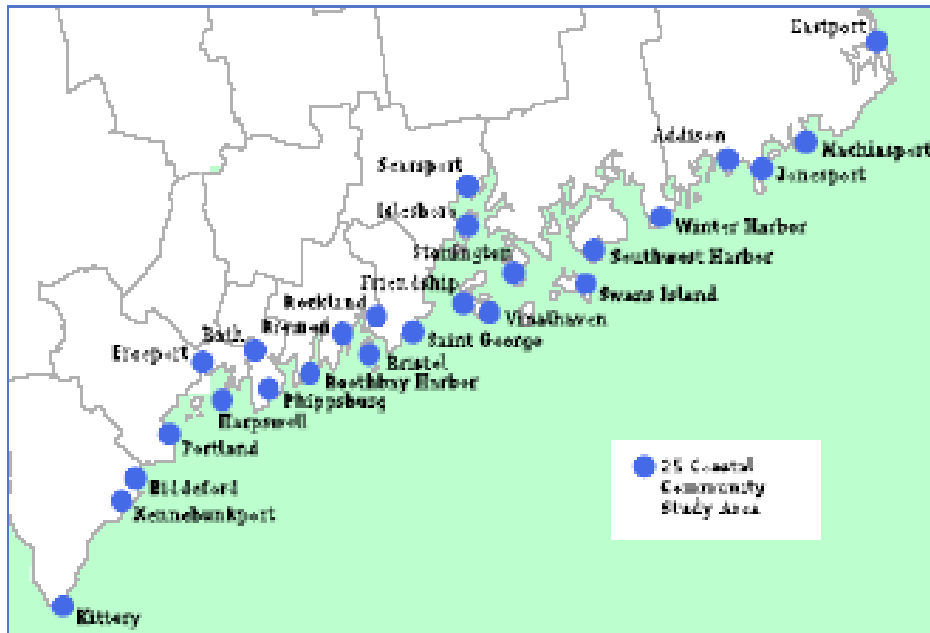
The *Maine Port Development Study*, by the Maine Department of Transportation, documented waterfront facilities from Kittery to Eastport in 1985. A second study, *Port Facilities Inventory and Analysis*, was conducted by The Southern Maine Economic Development District and the Eastern Maine Development Corporation in 1998 for the Maine Dept of Marine Resources. CEI added to these studies information from their interviews.

1737 miles of coastal Maine were surveyed in the study including islands and tidal rivers that are part of each town. Towns were selected based on the presence of a fishing industry, that represented geographic diversity (2-4 towns per county) and that offered a range in fishing, industry size, population, and planning approaches to the waterfront. Interviews were conducted from July to September 2002 through direct contact with town offices, municipal officials, staff, harbor masters, and members of relevant marine and/or waterfront committees. Each interview had a questionnaire and a review of boat access information (Cowperthwaite, 7). The towns were spread across all four of Maine's Coastal Regions as follows:

Table 13: Distribution of CEI Study towns in Maine

Region	Miles	# of Towns
Downeast & Acadia	551	8
Midcoast	961	12
Greater Portland & Casco Bay	105	2
Southern Maine	118	3

According to the study, Maine’s coast measures nearly 7,000 miles long as traced by tidal shore land from Kittery to Eastport (Cowperthwaite et al., p.4). The study thus represents data from approximately 25% of the coast of Maine.



“Boat access” is defined in this study as the total number of moorings, berthings, slips, and tie-ups. Boat usage is given in units of boats and was taken as a percentage of boat access, since not all boat access is used daily. The Julie N Report states usage rate percentages for five boat access sites that were impacted by the oil spill. An average of these five percentages was used for our report, yielding a usage rate of 44.3% of all boat access on any given day of the week. Using the same five boat access sites in the Julie N report, an average was calculated for the number of passengers per boat on any given day of the week. This average, of 3.2 persons, was then multiplied by boat usage to find the average number of boaters per day.

A daily average for boaters per region was calculated by totaling the number of boaters per day for all towns in the region and then dividing by the number of towns. For example, Downeast & Acadia has a total of 402 boaters across 8 towns, yielding an average of 50 recreational boaters per day, per town having boat access in that region. Baseline usage values, fees, and estimated daily revenues are summarized in the following table, detailed data may be found in Appendix G.

Table 14: Boat Access Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	184	\$0	\$0	\$0	\$0
Midcoast	469.75	\$0	\$0	\$0	\$0
Greater Portland	601.50	\$0	\$0	\$0	\$0
Southern Maine	472	\$0	\$0	\$0	\$0

Assuming that boating experiences along coastal Maine are valued equally, the data suggest that the Greater Portland & Casco Bay region may suffer the largest economic loss from a coastal oil spill. Since boat access is paid as a one time fee in the form of a seasonal mooring permit, daily usage fees are often unavailable. Interviews with harbor masters indicated that daily fees may be available depending on the length of the boat (e.g. \$1.00 per foot). However, there is currently no collection of data on the number of boats docking daily and the length of each vessel.

It is important to note that the data provided for boat access was available only for the CEI study and many users of this resource (such as port masters) do not continue to keep track of such data. The study recommends working directly with harbor masters on an annual access survey to track boat access issues and changes (Cowperthwaite et. al., p.6). The goal is to create a baseline of data to update and track changes in access.

5.7 Sea Kayaking

Data for sea kayaking businesses were available at the Maine Office of Tourism website (June 2004) and are found in Appendix H. There were a total of 45 sea kayaking businesses identified as having potential harm due to a coastal oil spill in Maine. There are currently no readily available data to indicate the use of any of these businesses. Owners or managers may, however, have records indicating usage in the form of revenues per season.

Daily fees were found by viewing business websites within the Maine Office of Tourism website. The italicized values in Appendix H were calculated as daily fees by manipulating available data. This calculation involved dividing multiple day fees by the number of days, multiplying half-day fees by 2, or using a 7 hour rate for a day rate.

Table 15: Sea Kayaking Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	U	\$98.86	U	U	U
Midcoast	U	\$120.59	U	U	U
Greater Portland	U	\$103.33	U	U	U
Southern Maine	U	\$95.22	U	U	U

The average fees suggest that Midcoast Maine has the largest charge for a day of sea kayaking, which may result in a higher daily revenue. We can see that usage data are lacking within the samples of this resource and, as a result, daily revenues could not be assessed.

5.8 Boat Tour

“Boat tour” is defined in this report to include whale watching businesses, boat tours, sea charters, and ferries. Data provided for this resource were available at the Maine Office of Tourism website (June 2004) and is found in Appendix I. There were a total of 111 boat tour businesses identified as having potential harm due to a coastal oil spill in Maine. There is currently little readily available data to indicate the use of the majority of these businesses. Emails were distributed in June 2004 to all businesses that posted email addresses on their websites to request usage data. Only two businesses responded (both from the Greater Portland & Casco Bay region). Due to this low sample of usage data within this region, an average usage rate was not calculated. It is important to note that one of these businesses, The Prince of Fundy Cruises Ltd. Ferry Service, is required to keep track of such usage data by the United States Coast Guard. They use paper logs to record the number of passengers per trip, which is then entered into a database.

Similar to the method used for sea kayaking, daily fees were found by locating and viewing business websites available from the Maine Office of Tourism website. The italicized values in Appendix I were calculated as daily fees by manipulating available data. This calculation involves dividing multiple day fees by the number of days, multiplying half day fees by 2, or using a 7 or 8 hour rate for a day rate.

Table 16: Boat Tour Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	U	\$183.71	U	U	U
Midcoast	U	\$304.24	U	U	U
Greater Portland	U	\$160.40	U	U	U
Southern Maine	U	\$330.12	U	U	U

The average daily fees suggest that Southern Maine has the largest average charge for a boat tour. This larger fee may result in higher daily revenues in this region, although we are unable to assess this value due to the lack of data. As stated earlier, each business may have records indicating usage in the form of revenues per season.

5.9 Shore Fishing

Data for the three modes of recreational fishing (shore, charter, and private/rental) were provided by the 2000 Marine Recreational Fisheries Statistics Survey (MRFSS). In 1998, 1690 surveys were distributed across the State of Maine resulting in the usage data found in Appendices J, K, and L. Interviews were conducted at fishing sites and more than one fishing mode may have been used per site. A recreational “fishing trip” is defined in the

survey as “fishing during part or all of a day in one mode.” A fisher from both a pier and a beach in the same location, on the same day, was counted as one trip. If fishing from two different modes in one day, then two fishing trips were recorded. The survey collects data on ocean fishing” and “inland fishing.²⁰” Inland fishing includes fishing in salt water bodies such as inlets, estuaries, and rivers. There was a total of 211 shore fishing sites identified in the MRFSS, which could be harmed by a coastal oil spill in Maine.

The survey results indicate that 61% of all recreational fishing was conducted on shore. There are no observable fees for the use of shore fishing sites, thus daily revenues are equal to \$0 per site. The survey noted that total travel expenses averaged \$19 per trip. Although beyond the focus for this report, this non-market value may be applied to a travel cost model to measure the value of a fishing trip. The three modes of recreational fishing have available usage data presented on a monthly basis so average daily usage values will vary depending on the month of interest. The daily usage value in this report is taken as an average over all months where recreational fishing occurred. All daily usage values are averaged from all days of data throughout the year. The survey provided data during both weekdays and weekends, which was averaged for a daily usage value (on any given day of the week).

Table 17: Shore Fishing Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	3.96	\$0	\$0	\$0	\$0
Midcoast	5.44	\$0	\$0	\$0	\$0
Greater Portland	5.11	\$0	\$0	\$0	\$0
Southern Maine	4.68	\$0	\$0	\$0	\$0

Average daily usage values varied slightly across all four Coastal States. Midcoast Maine has the highest usage rate, followed by Greater Portland & Casco Bay, Southern Maine, and Downeast Maine (in consecutive order). Assuming that fishing experiences along coastal Maine are valued equally, the data suggest that Midcoast Maine may suffer the largest economic loss from a coastal oil spill in this region. The MRFSS data are accessible online.

5.10 Charter Fishing

The MRFSS noted that only 1% of all recreational fishing was conducted on a charter boat and that fishers spent on average \$50 on boat fees when fishing on a charter or rental boat. This value is then used in this report for the average daily fee assuming each fisher participates in no more than one charter trip per day. There was no indication in the survey data of variations in this rate across the months where fishing occurred. There were a total of 43 charter fishing sites identified in the MRFSS, and thus having potential harm due to a coastal oil spill in Maine.

²⁰ The survey focuses on recreational fishing for fin fish, although usage data for other species may also be included

Similar to the calculations used in the shore fishing analysis, daily usage value is taken as an average over all months where recreational fishing occurred. The survey provided data during both weekdays and weekends, which was averaged for a daily usage value (on any given day of the week).

Table 18: Charter Fishing Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	11.50	\$50	\$50	\$575	\$575
Midcoast	7.77	\$50	\$50	\$386	\$386
Greater Portland	9.25	\$50	\$50	\$463	\$463
Southern Maine	8.18	\$50	\$50	\$409	\$409

Downeast Maine has the highest average usage rate at 12 fishers per day and the highest daily revenue, followed by Greater Portland & Casco Bay, Southern Maine, and Midcoast Maine (in consecutive order).

The data suggest that Downeast Maine may suffer the greatest economic loss for charter fishing businesses if a coastal oil spill were to occur in this region. Limitations of data include the lack of naming the charter business that departs from each fishing site. Usage values are therefore based on fishing sites for charter fishing, rather than on charter businesses.

5.11 Private Fishing

The MRFSS stated that 38% of all recreational fishing was conducted on a private boat. As defined earlier, “private fishing” is conducted by fishers either on their own boat or on a rental boat. The survey noted that fishers spent on average \$50 for boat fees when fishing on a charter or rental boat. This value is used in this report for the average daily fee, assuming each fisher participates in no more than one charter trip per day. There was no indication in the survey of variations in this rate by time of year. There were a total of 172 private fishing sites identified in the MRFSS, and thus having potential harm due to a coastal oil spill in Maine.

Fishers surveyed also noted that approximately 50% owned a boat used for recreational saltwater fishing. We can then assume that the remaining 50% would spend the \$50 rental fee. Thus, the daily revenue must only accommodate half of the average daily usage value. For example, Midcoast Maine has an average daily usage rate of 4.56 fishers, but only half of these are paying the \$50 boat rental fee. Therefore, the daily economic revenue is equal to \$141 (1/2 of 5.63 multiplied by \$50). Similar to the calculations used in both the shore fishing and charter fishing analysis, daily usage is taken as an average over all months where recreational fishing occurred. The survey provided data during both weekdays and weekends, which was averaged for a daily usage value (on any given day of the week).

Table 19: Private Fishing Usage Data, Fees, and Daily Revenues

Region	Avg. Daily Usage	Avg. Fee (Season)	Avg. Fee (Off-Season)	Daily Revenue (Season)	Daily Revenue (Off-Season)
Downeast	3.75	\$50	\$50	\$94	\$94
Midcoast	4.62	\$50	\$50	\$115	\$115
Greater Portland	5.63	\$50	\$50	\$141	\$141
Southern Maine	5.03	\$50	\$50	\$126	\$126

The Greater Portland & Casco Bay and Southern Maine regions have the highest average usage rate of 6 fishers per day and the highest daily revenue, followed by Midcoast Maine and Downeast Maine. The data suggest the Greater Portland & Casco Bay and Southern Maine regions may suffer greater economic losses for private fishing if a coastal oil spill were to occur in these regions.

6. Results and Future Research

6.1 Results

The usage data presented in this paper only reflects the available usage data for the 729 recreational sites previously identified. There are, however, several remaining coastal resources outside of this sample size that most likely have recreational usage on a daily or seasonal basis, however such data are not readily available. If an oil spill occurred today, those resources without documented usage data would be omitted from legal compensation and economic losses would only represent a small portion of what may be claimed if the data were available. The presented data is therefore best represented as a lower bound or minimum level of documented usage data available.

Usage data for Maine's coastal recreational resources are tracked using a variety of methods (depending on the resource) such as head counts, parking passes, permits, observations, surveys, and logs. Accordingly, most are surrogates for actual observed counts. The data documented in this report suggest that limited systematically collected usage data exist for coastal recreational resources. Limitations are present in the data for all coastal recreational resources. For example, observable fees did not include factors such as discount rates, children or senior rates, and rates for special events.

State and national parks (both day and overnight use) as well as the majority of the sites within state historic sites use head counts to track usage. They are the only coastal resources that have a systematic data collection method in place. Surveys used to collect usage data for public beaches represent only 25 of the 46 beaches (nearly 50%) identified in this report and the data provided are very wide ranged (e.g. 1-2 million+ users per day). Though data may be systematically collected for state and national parks and historic sites, limitations are present and should be considered. For example, all of these resources have one-time seasonal fees (permits or parking passes), which increase the difficulty in calculating economic loss since there is no indication of what percentage of users are paying with daily fees versus seasonal fees. Another limitation for these resources is that often there are several access points, such as private pathways to parks and beaches, which can result in underestimating usage by the avoidance of daily fees and/or the method of data collection. Additionally, as daily fees are assessed on a per vehicle basis, there is no record of how many users are within each vehicle. Moreover, some of these sites have parking passes valid for multiple parking lots and for multiple uses (e.g., not just for use of the coastal beach or state park).

MITA has reports available indicating usage for 44 of the 45 public islands. However, they are unaware of what percentage of usage is recorded in their log books. As a result, these data may highly underestimate actual usage. We infer boat usage by using data from the Julie N Lost Use Valuation Report to calculate an average of 44.3% of boat access that is used on a daily basis. An average was also taken for the number of passengers per boat on any given day of the week. This average, of 3.2 persons, was then multiplied by the boat usage to find the average number of boaters per day. Another limitation to boat access data is that the CEI study represents only 25% of boat access on the coast of Maine. Sea kayaking and boat tour businesses do not have accessible usage

data and may lack the incentive to track such data. It is important to note, however, that these private businesses may have records of such data in the form of revenues.

Limitations also exist in the MRFSS usage data for shore fishing, charter fishing, and private fishing since data is averaged and therefore less precise. For instance, daily usage is taken as an average over all months where recreational fishing occurred, while the survey provides data on a monthly basis. In addition, data was available for both weekdays and weekends, which was averaged for a daily usage value (on any given day of the week). Averaging the usage data does not take into consideration the factor of congestion, which often occurs for recreational resources and activities during peak months and/or on weekends. The Bureau of Parks and Lands has monthly usage data available that could be used for more precise daily usage rates per month, although we considered only annual data. This issue of congestion should be taken into consideration for all coastal recreational resources identified in this report.

The extent of economic loss to recreational sites is dependent upon daily usage rates, the value people place on the activities or resources, the number of days impacted, and the time of year. As stated earlier, the economic analysis considers only direct market fees in assessing daily revenues. The assessed daily revenues documented in this report indicate that public beaches, state and national parks, and state historic sites may suffer the highest economic losses, although only a portion of economic loss is captured in the form of revenues. All coastal resources may however, be quantified and compensated for (under OPA) in terms of non-market values captured in the form of consumer surplus.²¹

The use and access of most coastal resources does not occur through well-defined markets. For example, fishers do not directly pay a fee to enjoy a day of shore fishing, but there is a substantial non-market value to them. Such values are often omitted from legal compensation because they are very difficult and costly to quantify. To the extent that fees have a consistent relationship to the value people place on the use of or access to coastal resources, our data can indicate where the greatest economic losses may occur. Quantifying actual losses requires economic analyses such as benefit transfers and contingent valuation studies, which are beyond the scope of this report.

6.2 Future Research

Improvements can be made for quantifying economic loss by increasing the capacity of both market and non-market values. Use values can be estimated with revealed, hypothetical, or stated preference methods, while non-uses can be estimated only with hypothetical methods. For example, documenting consumer surplus and non-market values could be conducted through survey research. Current data for this type of valuation is often non-existent, thus damages are highly underestimated.

Further research on the non-use valuation of recreational activities would be an asset. Also, many resources are impacted by diminished consumer surplus, which would

²¹ Consumer surplus is the measure of an individual's value of a good, above and beyond any payments that are necessary to obtain that good or service.

involve only a percentage of the economic loss. The Exxon Valdez damage assessment report showed a negative loss to pleasure boating due to increased visits to the affected area for viewing the spill. It should be noted that natural disasters, such as oil spills may occasionally increase the use of resources. This complicates the damage assessment even further and may obscure some of the damages from the persons who abstain due to the reduced quality. These limitations raise the challenge for quantifying economic loss. This report therefore underestimates total lost use because it focuses only on direct impacts to coastal recreational resources.

Future research should include filling in the baseline gaps (noted as “U” for unavailable) found in the appendices to this report. Tracking usage rates is not a high priority within coastal recreational resources due to lack of incentives. The state may want to investigate the outcomes of providing such an incentive to coastal resources. An easily accessible website could involve posting usage data to be viewed by all interested parties. An important next step in identifying assets endangered by oil spills is to research cost-effective strategies for collecting usage data and activity values. Throughout this process, the question of who will collect the data and pay for the collection must also be considered. Examples of possible cost-effective collection methods may include implementing traffic counters, such as those used in Acadia National Park, to state beaches. Periodic reviews could be used to enforce data collection. When calculating economic loss, it is also important to have information on determining factors such as weather conditions and closures of resources due to other causes, such as construction.

Outside of Maine, assessments for economic loss experience similar challenges to those outlined in this report. For instance, Massachusetts, Delaware, New Jersey, and Pennsylvania do not have usage data for recreational resources. NOAA explains the situation as follows:

“In the Northeast, region usage data is usually not sufficient for undertaking original valuation, but can be used in benefits transfer. Applying the right value to trips at a site, or lost trips following a spill is the hard part. NOAA usually ends up pulling values from the literature, which are not from the same state, but at least the same region of the country. All these States typically use the same basic benefits transfer methods to calculate recreational values. Larger cases may involve original research. In the case of a spill, our office at NOAA would typically work with the states in assessing losses. We do not handle smaller spills and I don’t believe the state response would typically involve lost use valuation for those smaller spills.”

Additional improvements may evolve by comparing the approaches and standards used for litigation processes in other Coastal States to those used in the State of Maine. For instance, the states of Washington and Florida use a comprehensive compensation schedule to calculate a dollar charge per gallon of oil spilled. This value is dependent on factors such as oil toxicity, environmental sensitivity or vulnerability, cleanup, and protective actions. A score is determined from these factors using a mathematical formula to calculate the monetary value for damages. Since, the cost of conducting the natural resource damage assessment often exceeds the actual value of the lost resources; the compensation schedule is a faster approach than the formal damage assessment.

These States are also segmented in marine waters with over 100 zones to individualize the analysis to specific areas. Maine may want to consider a similar approach for future oil spills compensation.

The DEP's suggestion that gaps exist in present socio-economic coastal data is supported in this report. Based on the likelihood of a coastal oil spill in Maine and the existing gaps in usage data, it may well be worthwhile for the state to invest in the collection of usage data beyond what is documented in this report. A long-term strategy should be considered by the State of Maine to enhance current policies with essential and necessary usage data. With up-to-date baseline data on the value and use of recreational resources, compensation and restoration processes can begin in a timely and efficient manner.

7. Conclusions and Policy Implications

The Julie N spill taught the State of Maine a valuable lesson of planning ahead. Even with the latest developments such as double hull designs - accidents, collisions and groundings still occur. Delays in damage assessments often arise from the lack of baseline data described in this report. Obtaining data at the town or municipal level and the quantification of non-market values would be very beneficial to the State of Maine. These data can also be used to support calculations of benefits and costs of public projects that might be undertaken along the coast of Maine.

Many legal claims following the event of an oil spill have required data that are both available and systematically collected. If an oil spill occurred along coastal Maine today, there would be only limited systematically collected baseline data available for quantifying the economic damage to several recreational resources such as boat tours and public beaches.

The research outlined within this report has the potential to supplement management of coastal Maine and save the state extensive time and money. In addition, affected parties can be assured that they are compensated accurately and that recovery of resources can begin with few time constraints. Documenting usage rates and values of coastal resources is a very useful tool for many agencies in determining recovery costs of coastal resources due to an oil spill in the future. Several agencies and institutes within Maine, including the Maine Island Trail Association, Maine Coast Heritage Trust, The University of Maine, College of the Atlantic, and the Bureau of Parks & Lands, have expressed concern regarding the lack of recreational baseline data along coastal Maine.

Even though very few natural resource claims have gone to court in the past, the foresight to present strong data may help to settle claims more quickly. Additionally, state, municipal, and other agencies may want to increase data collection procedures as part of their normal course of business. This would not only be helpful if there were an oil spill, but may help document which coastal resources are most heavily used such that their management and contribution to the economic well-being of Maine can be enhanced. The end goal is to ensure that, in the event of a spill, there is clear and known baseline data as well as an identification of any limitations. The advantages of baseline data such as timeliness in the event of a spill, can only be realized if the appropriate data are maintained, thus it is recommended that resource managers work toward this goal.

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Appendix A – Data Summary Tables

Table 1: Available / Unavailable Usage Data, Methods, and Sources

Resource	Region	#	Data	No Data	Data Used	Data Available	Source of Data	Method
State Historic Sites	DE	1	0	1	2001-2004	1966+	Bureau of P&L	Head Counts
	MID	5	5	0	2001-2004	1966+	Bureau of P&L	Head Counts
	GP	0	N/A	N/A	N/A	N/A	Bureau of P&L	Head Counts
	SME	2	1	1	2001-2004	1966+	Bureau of P&L	Head Counts
State and National Parks (Day Use)	DE	6	5	1	2001-2004	1966+	Bureau of P&L	Head Counts
	MID	9	9	0	2001-2004	1966+	Bureau of P&L	Head Counts
	GP	3	3	0	2001-2004	1966+	Bureau of P&L	Head Counts
	SME	1	1	0	2001-2004	1966+	Bureau of P&L	Head Counts
State and National Parks (Overnight Use)	DE	3	3	0	2001-2004	1966+	Bureau of P&L	Head Counts
	MID	2	2	0	2001-2004	1966+	Bureau of P&L	Head Counts
	GP	N/A	N/A	N/A	2001-2004	1966+	N/A	N/A
	SME	N/A	N/A	N/A	2001-2004	1966+	N/A	N/A
Public Islands	DE	23	22	1	2000-2003	2000-2003	MITA	Logs
	MID	18	18	0	2000-2003	2000-2003	MITA	Logs
	GP	4	4	0	2000-2003	2000-2003	MITA	Logs
	SME	0	N/A	N/A	N/A	N/A	N/A	N/A
Public Beaches	DE	3	1	2	2003	2003	Health Programs	Survey
	MID	7	4	3	2003-2004	2003-2004	Health Programs	Survey
	GP	4	2	2	1999-2003	1999-2003	Health Programs	Survey
	SME	31	18	13	1999-2004	1999-2004	Health Programs	Survey
Boat Access	DE	8	8	0	2002	2002	CEI Study	Permits
	MID	12	12	0	2002	2002	CEI Study	Permits
	GP	2	2	0	2002	2002	CEI Study	Permits
	SME	3	3	0	2002	2002	CEI Study	Permits
Sea Kayaking	DE	14	0	14	0	U	U	U
	MID	16	0	16	0	U	U	U
	GP	7	0	7	0	U	U	U
	SME	8	0	8	0	U	U	U
Boat Tour	DE	30	0	30	0	U	U	U
	MID	47	1	46	2003	U	Contacted	Database
	GP	20	1	19	2003	U	Contacted	CG req, Database
	SME	14	0	14	0	U	U	U
Shore Fishing	DE	74	74	0	2000	2000	MRFSS	Survey and logs
	MID	77	77	0	2000	2000	MRFSS	Survey and logs
	GP	16	16	0	2000	2000	MRFSS	Survey and logs
	SME	44	44	0	2000	2000	MRFSS	Survey and logs
Charter Fishing	DE	2	2	0	2000	2000	MRFSS	Survey and logs
	MID	23	23	0	2000	2000	MRFSS	Survey and logs
	GP	4	4	0	2000	2000	MRFSS	Survey and logs
	SME	14	14	0	2000	2000	MRFSS	Survey and logs
Private Fishing	DE	65	65	0	2000	2000	MRFSS	Survey and logs
	MID	67	67	0	2000	2000	MRFSS	Survey and logs
	GP	14	14	0	2000	2000	MRFSS	Survey and logs
	SME	26	26	0	2000	2000	MRFSS	Survey and logs

Table 2: Collected Usage Data, Fees, and Revenue Assessments

Resource	Region	Avg. Users / Day	Avg. Daily Fee (Season)	Avg. Daily Fee (Off Season)	Assessed Daily Rev (Season)	Assessed Daily Rev (Off Season)
State Historic Sites	DE	U	\$0	\$0	\$0	\$0
	MID	452	\$2.00	\$1.20	\$904	\$542
	GP	N/A	N/A	N/A	N/A	N/A
	SME	395	\$1	\$0.75	\$395	\$296
State and National Parks (Day Use)	DE	1,460.90	\$5	\$4.33	\$7,305	\$6,331
	MID	445.78	\$1.83	\$1	\$817	\$446
	GP	388.61	\$3.17	\$1.50	\$1,232	\$583
	SME	384	\$3	\$1.50	\$1,152	\$576
State and National Parks (Overnight Use)	DE	195.01	\$24.67	\$19	\$4,810	\$3,705
	MID	77.50	\$17	\$11.50	\$1,318	\$891
	GP	N/A	N/A	N/A	N/A	N/A
	SME	N/A	N/A	N/A	N/A	N/A
Public Islands	DE	0.72	\$0	\$0	\$0	\$0
	MID	0.71	\$0	\$0	\$0	\$0
	GP	4.88	\$0	\$0	\$0	\$0
	SME	N/A	N/A	N/A	N/A	N/A
Public Beaches	DE	65.79	U	U	U	U
	MID	121.71	U	U	U	U
	GP	50.16	\$1.67	U	\$84	U
	SME	2500.64	\$6.80	U	\$16,732	U
Boat Access	DE	184	\$0	\$0	\$0	\$0
	MID	469.75	\$0	\$0	\$0	\$0
	GP	601.50	\$0	\$0	\$0	\$0
	SME	472	\$0	\$0	\$0	\$0
Sea Kayaking	DE	U	\$98.86	U	U	U
	MID	U	\$120.59	U	U	U
	GP	U	\$103.33	U	U	U
	SME	U	\$95.22	U	U	U
Boat Tour	DE	U	\$183.71	U	U	U
	MID	U	\$304.24	U	U	U
	GP	U	\$160.40	U	U	U
	SME	U	\$330.12	U	U	U
Shore Fishing	DE	3.96	\$0	\$0	\$0	\$0
	MID	5.44	\$0	\$0	\$0	\$0
	GP	5.11	\$0	\$0	\$0	\$0
	SME	4.68	\$0	\$0	\$0	\$0
Charter Fishing	DE	11.50	\$50	\$50	\$575	\$575
	MID	7.77	\$50	\$50	\$386	\$387
	GP	9.25	\$50	\$50	\$463	\$440
	SME	8.18	\$50	\$50	\$409	\$409
Private Fishing	DE	3.75	\$50	\$50	\$94	\$94
	MID	4.62	\$50	\$50	\$115	\$114
	GP	5.63	\$50	\$50	\$141	\$132
	SME	5.03	\$50	\$50	\$126	\$126

Appendix B – State Historic Sites

State Historic Sites Data

Source – Bureau of Parks & Lands, Day Use Reports c/o Charlene Daniels, 2005

Town	Name	2001	2002	2003	2004	Avg. Usage/ Year	Days Open/ Year	Avg. Usage/ Day	Fee (Season)	Fee (Off- (Season)	Assessed Daily Rev (Season)	Assessed Daily Rev (Off-Season)
<i>DOWNEAST</i>												
Machiasport	Fort O'Brien	U	U	U	U	U	99	U	\$0	\$0	\$0	\$0
Average								U	\$0	\$0	\$0	\$0
<i>MIDCOAST</i>												
Prospect	Fort Knox	55,106	56,809	49,470	56,566	54,488	183	297.75	\$3	\$1.50	\$893	\$447
Edgecomb	Fort Edgecomb	7,214	6,043	5,387	6,093	6,184	99	62.47	\$2	\$1.50	\$125	\$94
Popham					106,850							
Beach	Fort Popham	103,940	101,889	98,531		102,803	123	835.79	\$0	\$0	\$0	\$0
South					5,869							
Harpswell	Eagle Island	7,057	6,428	4,805		6,040	84	71.90	\$3	\$1.50	\$216	\$108
Bristol	Colonial Pemaquid	103,141	100,543	100,315	88,913	98,228	99	992.20	\$2	\$1.50	\$1,984	\$1,488
Average								452.02	\$2.00	\$1.20	\$904	\$542
<i>SOUTHERN MAINE</i>												
Kittery Point	Fort McClary	55,442	54,667	37,782	46,501	48,598	123	395.11	\$2	\$1.50	\$790	\$593
Kittery	John Paul Jones Memorial	U	U	U	U	U	365	U	\$0	\$0	\$0	\$0
Average								395.11	\$1.00	\$0.75	\$395	\$296

Appendix C – State and National Parks (Day Use)

State and National Parks (Day Use) Data

Source – Bureau of Parks & Lands, Day Use Reports c/o Charlene Daniels, 2005

Town	Name	2001	2002	2003	2004	Avg. Usage/ Year	Days Open/ Year	Avg. Usage/ Day	Fee (Season)	Fee (Off-Season)	Assessed Daily Rev (Season)	Assessed Daily Rev (Off-Season)
<i>DOWNEAST</i>												
Bar Harbor	Acadia National Park	2373259	2413687	2291817	U	2359588	365	6464.62	\$20	\$20	\$129,292	\$129,292
Lubec	Quoddy Head State Park	86161	96639	87158	80915	87718	154	569.60	\$2	\$1.50	\$1,139	\$854
Dennysville	Cobscook Bay State Park	7144	5953	5351	5196	5911	154	38.38	\$3	\$1.50	\$115	\$58
Lamoine	Lamoine State Park	14519	14934	13961	13583	14249	154	92.53	\$3	\$1.50	\$278	\$139
Eastport	Shackford Head State Park	U	U	U	U	U	365	U	\$0	\$0	\$0	\$0
Roque Bluffs	Roque Bluffs Park	26481	22251	19832	9487	19513	140	139.38	\$2	\$1.50	\$279	\$209
Average								1460.90	\$5	\$4.33	\$7,305	\$6,331
<i>MIDCOAST</i>												
Georgetown	Reid State Park	209098	182155	158720	156139	176528	365	483.64	\$3.50	\$1.50	\$1,693	\$725
Owls Head	Birch Point Park	34150	48835	43376	34511	40218	99	406.24	\$0	\$0	\$0	\$0
Owls Head	Owls Head Lighthouse State Park	39160	38075	52911	39794	42485	365	116.40	\$0	\$0	\$0	\$0
Stockton Springs	Fort Point (Fort Pownall)	32315	29715	21060	29044	28034	99	283.17	\$2	\$1.50	\$566	\$425
Camden	Camden Hills State Park	200941	204187	149943	161273	179086	154	1162.90	\$3	\$1.50	\$3,489	\$1,744
Islesboro	Warren Island State Park	2929	3170	2672	5459	3558	108	32.94	\$3	\$1.50	\$99	\$49
Brooksville	Holbrook Island Sanctuary State Park	29553	29745	28341	23134	27693	365	75.87	\$0	\$0	\$0	\$0
Searsport	Moose Point State Park	74633	70445	34765	24567	51103	124	412.12	\$2	\$1.50	\$824	\$618
Phippsburg	Popham Beach State Park	216858	225940	194614	189414	206707	199	1038.73	\$3	\$1.50	\$3,116	\$1,558
Average								445.78	\$1.83	\$1	\$817	\$446
<i>GREATER PORTLAND & CASCO BAY</i>												
Cape Elizabeth	Crescent Beach State Park	113617	100573	90960	80326	96369	134	719.17	\$3.50	\$1.50	\$2,517	\$1,079
Cape Elizabeth	Two Lights State Park	68742	58600	58093	50964	59100	365	161.92	\$3	\$1.50	\$486	\$243
Freeport	Wolfe's Neck Woods State Park	30696	26954	25983	29121	28189	99	284.73	\$3	\$1.50	\$854	\$427
Average								388.61	\$3.17	\$1.50	\$1,231	\$583
<i>SOUTHERN MAINE</i>												
Saco	Ferry Beach State Park	46616	51791	45787	46142	47584	124	383.74	\$3	\$1.50	\$1,152	\$576
Average								384.00	\$3	\$1.50	\$1,152	\$576

Appendix D – State and National Parks (Overnight Use)

State and National Parks (Overnight Use) Data

Source – Bureau of Parks & Lands, Day Use Reports c/o Charlene Daniels, 2005

Town	Name	2001	2002	2003	2004	Avg. Usage/ Year	Days Open/ Year	Avg. Usage/ Day	Fee (Season)	Fee (Off-Season)	Assessed Daily Rev (Season)	Assessed Daily Rev (Off-Season)
<i>DOWNEAST</i>												
Bar Harbor	Acadia National Park	143292	144885	139245	130073	139374	365	381.85	\$40	\$34	\$15,274	\$12,983
Dennysville	Cobscook Bay State Park	19481	19427	18068	15540	18129	164	110.54	\$16.50	\$11.50	\$1,824	\$1,271
Lamoine	Lamoine State Park	15427	15284	14930	15138	15195	164	92.65	\$17.50	\$11.50	\$1,621	\$1,065
Average								195.01	\$24.67	\$19	\$4,810	\$3,705
<i>MIDCOAST</i>												
Camden	Camden Hills State Park	23842	24672	22199	21366	23020	164	140.36	\$17.50	\$11.50	\$2,456	\$1,614
Islesboro	Warren Island State Park	2734	1937	2203	2729	2401	164	14.64	\$16.50	\$11.50	\$242	\$168
Average								77.50	\$17	\$11.50	\$1,318	\$891

Appendix E –Public Islands

Public Islands Data Source – Maine Island Trail Association, c/o Amy Kersteen, 2005

Name	2000	2001	2002	2003	Avg. Usage/ Year	Avg. Usage/ Day	Fee	Assessed Daily Rev
East Barred	0	U	U	U	0	0.00	\$0	\$0
Weir	14	12	13	52	23	0.37	\$0	\$0
Doliver	0	U	U	U	0	0.00	\$0	\$0
Wheat	31	42	49	88	53	0.85	\$0	\$0
Harbor	71	61	192	268	148	2.39	\$0	\$0
Steves	40	43	177	U	87	1.40	\$0	\$0
Hells Half Acre	68	70	262	440	210	3.39	\$0	\$0
Little Sheep	26	51	68	104	62	1.00	\$0	\$0
Potato	16	20	73	73	46	0.73	\$0	\$0
Apple	20	3	15	55	23	0.38	\$0	\$0
Little Hog	14	28	77	84	51	0.82	\$0	\$0
Sellers	59	46	149	199	113	1.83	\$0	\$0
Hen	2	25	U	101	43	0.69	\$0	\$0
John	0	U	U	43	22	0.35	\$0	\$0
The Hub	0	19	80	152	63	1.01	\$0	\$0
Little Crow	0	U	U	U	0	0.00	\$0	\$0
Dry	0	U	U	U	0	0.00	\$0	\$0
Mink		U	31	U	31	0.50	\$0	\$0
Daniels	0	U	12	U	6	0.10	\$0	\$0
The Sands	0	U	U	U	0	0.00	\$0	\$0
Indian River	0	U	U	U	0	0.00	\$0	\$0
Stevens	U	U	U	116	116	U	\$0	\$0
Little Water	0	U	U	U	0	0.00	\$0	\$0
Average						0.72	\$0	\$0
MIDCOAST								
Strawberry Creek	6	10	6	23	11	0.18	\$0	\$0
Indian Point	0	U	U	U	0	0.00	\$0	\$0
Basin	28	38	188	166	105	1.69	\$0	\$0
Little Snow	38	52	204	208	126	2.02	\$0	\$0
Perkins	24	25	22	37	27	0.44	\$0	\$0
Goat	0	2	U	10	4	0.06	\$0	\$0
Bird	0	U	U	26	13	0.21	\$0	\$0
Erratic	6	7	4	25	11	0.17	\$0	\$0
Fort	0	U	7	247	85	1.37	\$0	\$0
Little Marsh	0	U	265	18	94	1.52	\$0	\$0
Thief	35	55	U	218	103	1.66	\$0	\$0
Crow-Muscongus	23	31	U	159	71	1.15	\$0	\$0
Strawberry	16	17	51	88	43	0.69	\$0	\$0
Havener Ledge	14	6	U	12	11	0.17	\$0	\$0
Little Thorofare	9	3	11	20	11	0.17	\$0	\$0
Little Hen	12	23	43	68	37	0.59	\$0	\$0
Hay	14	22	19	45	25	0.40	\$0	\$0
Ram (Pen Bay)	10	22	34	25	23	0.37	\$0	\$0
Average						0.71	\$0	\$0
GREATER								
Little Chebeague	19	116	203	467	201	3.25	\$0	\$0
Crow-Casco	10	40	195	195	110	1.77	\$0	\$0
Jewell	44	185	2467	U	899	14.49	\$0	\$0
Bar-Casco	0	U	U	U	0	0.00	\$0	\$0
Average						4.88	\$0	\$0

Appendix F – Public Beaches

Public Beaches Data

Source – University of Maine Extension, Maine's Healthy Coastal Beaches Program, National Health Protection Survey c/o Esperanza Stancioff, 2005

Town	Name	1999-Off Season	1999	2002	2003	2004	Avg. Usage/ Year	Days Open/ Year	Avg. Usage/ Day	Fee	Assessed Daily Rev
DOWNEAST											
Mt. Desert Island	Seal Harbor	U	U	U	8-12000	U	10000	152	65.79	U	U
Average									65.79	U	U
MIDCOAST											
Sagadahoc	Small Point Beach	U	U	U	U	U	U	152	U	U	U
Camden	Laite	U	U	U	5000	U	5000	152	32.89	U	U
Lincolnton	Lincolnton Beach	U	U	U	U	9500	9500	152	62.50	U	U
Lincolnton	Ducktrap	U	U	U	U	9500	9500	152	62.50	U	U
Rockland	Rockland Beach	U	U	U	U	U	U	152	U	U	U
Bristol	Pemaquid	U	U	U	50000	U	50000	152	328.95	U	U
Phippsburg	Phippsburg Beach – Totman Preserve	U	U	U	U	U	U	152	U	U	U
Average									121.79	U	U
GREATER PORTLAND & CASCO BAY											
S. Portland	Willard Beach	<100	500- 9,999	U	20000	U	8450	152	55.59	\$0	\$0
Portland	East End Beach	<100	<100-499	20000	U	U	6800	152	44.74	\$0	\$0
Scarborough	Pine Point Beach	U	U	U	U	U	U	152	U	U	U
Scarborough	Ferry Beach/ Western Beach	U	U	U	U	U	U	152	U	\$5	U
Average									50.16	\$1.67	\$84
SOUTHERN MAINE											
York	York Harbor Beach	U	U	U	1-2 million+	U	1500000	152	9868.42	\$5	\$49,340
York	Long Beach	U	U	U	1-2 million+	U	1500000	152	9868.42	\$5	\$49,340
York	Cape Neddick	U	U	U	1-2 million+	U	1500000	152	9868.42	\$5	\$49,340
York	Short Sands Beach	U	U	U	1-2 million+	U	1500000	152	9868.42	\$5	\$49,340
Ogunquit	Ogunquit Beach	U	U	U	5220	U	5250	152	34.54	\$25	\$875
Wells	Moody Beach	U	U	U	U	U	U	152	U	\$12	U
Wells	Footbridge Beach	U	U	U	U	U	U	152	U	\$12	U
Wells	Crescent Surf Beach	U	U	U	U	U	U	152	U	\$7	U
Wells	Laudholm Beach	U	U	U	U	U	U	152	U	\$7	U
Wells	Drakes Island Beach	U	U	U	160589	U	160589	152	U	\$7	\$7,399

Town	Name	1999-Off Season	1999	2002	2003	2004	Avg. Usage/Year	Days Open/Year	Avg. Usage/Day	Season/Off Season	Season/Off Season
Wells	Wells Beach	U	U	U	U	U	U	152	1056.51	\$7	U
Wells	Nothend of Moody Beach	U	U	U	U	U	U	152	U	U	U
Kennebunkport	Cleaves Cove Beach	U	U	U	U	U	U	152	U	\$0	\$0
Kennebunkport	The Colony Beach	U	U	U	U	U	U	152	U	\$0	\$0
Kennebunkport	Goose Rocks Beach	U	U	U	U	66500	66500	152	U	\$5	\$2,190
Kennebunkport	Turbatts Creek	U	U	U	U	U	U	152	437.50	U	U
Kennebunk	Gooches	U	U	11081	U	U	11081	152	U	U	U
Kennebunk	Libby Cove	U	U	11081	U	U	11081	152	72.90	U	U
Kennebunk	Middle	U	U	11081	U	U	11081	152	72.90	U	U
Kennebunk	Parsons	U	U	11081	U	U	11081	152	72.90	U	U
Kennebunk	Kennebunk Beach	U	U	11081	U	U	11081	152	72.90	U	U
Kittery	Seapoint Beach	U	U	U	U	U	U	152	72.90	U	U
Kittery	Barter's Creek	U	U	U	U	U	U	152	U	U	U
Biddeford	Fortune Rocks	U	U	U	25-30000	U	27500	152	U	U	U
Biddeford	Biddeford Pool Beach	U	U	U	25-30000	U	27500	152	180.92	U	U
Biddeford	Middle	U	U	U	25-30000	U	27500	152	180.92	U	U
Biddeford	Hills	U	U	U	25-30000	U	27500	152	180.92	U	U
Saco	Bayview Beach	U	U	U	U	U	U	152	180.92	\$0	\$0
Old Orchard Beach	Old Orchard Beach	100-9999	1000-10000+	65,000-1.5 million	U	U	394000	152	U	U	U
Saco	Kinney Shores	U	U	U	U	50000	50000	152	2592.11	U	U
Saco	Camp Ellis	U	U	U	U	U	U	152	328.95	\$5	U
Average									2500.64	\$6.80	\$16,732

Appendix G – Boat Access

Boat Access Data

Source – Maine State Planning Office Coastal Program, Coastal Enterprises Inc. Study, “Preserving Commercial Fishing Access – A Study of Working Waterfronts in 25 Maine Communities”, Cowperthwaite, Hugh and Sheehan, Elizabeth, 2002

Town	Access/ Year	Usage/ Year	Avg. Usage/ Day	Fee	Assessed Daily Rev
<i>DOWNEAST</i>					
Eastport	7	3	9.82	\$0	\$0
Machiasport	29	13	41.73	\$0	\$0
Addison	46	20	65.21	\$0	\$0
Jonesport	74	33	105.26	\$0	\$0
Winter Hbr.	75	33	105.97	\$0	\$0
Southwest Hbr.	474	210	672.37	\$0	\$0
Swans Island	50	22	70.88	\$0	\$0
Stonington	153	68	216.72	\$0	\$0
Total	909	402	1288	\$0	\$0
Average	114	50	184	\$0	\$0
<i>MIDCOAST</i>					
Searsport	24	11	34.19	\$0	\$0
Islesboro	68	30	95.93	\$0	\$0
Vinalhaven	32	14	45.36	\$0	\$0
St. George	129	57	183.15	\$0	\$0
Friendship	69	31	97.74	\$0	\$0
Rockland	405	179	574.13	\$0	\$0
Bremen	99	44	140.06	\$0	\$0
Bristol	476	211	674.78	\$0	\$0
Boothbay Hbr.	249	110	352.42	\$0	\$0
Bath	121	54	171.59	\$0	\$0
Phippsburg	425	188	602.48	\$0	\$0
Harpswell	1880	833	2665.37	\$0	\$0
Total	3977	1762	5637	\$0	\$0
Average	331	147	469.75	\$0	\$0
<i>GREATER PORTLAND & CASCO BAY</i>					
Freeport	498	221	706.53	\$0	\$0
Portland	350	155	496.16	\$0	\$0
Total	848	376	1203	\$0	\$0
Average	424	188	601.50	\$0	\$0
<i>SOUTHERN MAINE</i>					
Biddeford	302	134	427.41	\$0	\$0
Kennebunkport	251	111	355.53	\$0	\$0
Kittery	447	198	633.02	\$0	\$0
Total	447	442	1416	\$0	\$0
Average	149	147	472	\$0	\$0

Appendix H - Sea Kayaking

Sea Kayaking Data

Source – Maine Office of Tourism website, business websites, 2004

Town	Name	Usage	Fee / Day	Avg. Fee / Day	Fee / Hour	Assessed Daily Rev
DOWNEAST						
Bar Harbor	Coastal Kayaking Tours	U	\$69	\$69		U
Bar Harbor	College of the Atlantic	U				U
Bar Harbor	Acadia 1 Watersports	U	\$45	\$45		U
Bar Harbor	Maine Professional Guides Association	U				U
Bar Harbor	National Park Sea Kayak Tours	U	45-.5d, 90	\$90		U
Bar Harbor	Island Adventures	U				U
Belfast	Custom Kayak Tours	U	\$160	\$160		U
Brooksville	Sunrise Cottages	U				U
Castine	Castine Kayak Adventures	U	105/110	\$107.50		U
Falmouth	Maine Audubon	U				U
Pembroke	Tidal Trails Eco-tours	U				U
Portland	Maine Family Adventures	U				U
SW Harbor	Maine State Sea Kayak Guide Service Old Quarry Ocean Adventures	U	\$80.50	\$80.50	46-4h	U
Stonington	& Campground Inc.	U	105/175	\$140		U
Average				\$98.86		U
MIDCOAST						
Rockport	Breakwater Kayak, LLC	U	\$95	\$95		U
Rockport	Maine Professional Guides Association	U				U
Alna	Maine Saltwater Guide Service	U	350/425	\$388		U
Belfast	Custom Kayak Tours	U				U
Falmouth	Maine Audubon	U				U
Boothbay	Tidal Transit	U	\$70	\$70		U
Brunswick	Seaspray Kayaking Tours, Rentals & Guide Service	U	\$40	\$40		U
Edgecomb	Tideway Treks Inc	U	\$95	\$95	95-7h	U
Hope	Riverdance Outfitters	U	\$125	\$125		U
Lincolnville	Ducktrap Sea Kayaking	U				U
Lincolnville	H2Outfitters	U	60/85/75	\$73.33		U
Portland	Maine Family Adventures	U				U
Phippsburg	Gillies & Fallon Guide Service Inc	U				U
Rockport	Maine Sport Outfitters	U	275/350-2d 156.25	\$156.25		U
Round Pond	Sea Spirit Adventures	U	\$95	\$95	95-7h	U
Vinalhaven	Sea Escape Kayak	U	45/75/85	\$68.33		U
Average				\$120.59		U
GREATER PORTLAND & CASCO BAY						
Peaks Island	Maine Island Kayak Company	U	\$95	\$95		U
Falmouth	Maine Audubon	U				U
Portland	Maine Family Adventures	U				U
Portland	Maine Professional Guides Association	U				U
Edgecomb	Tideway Treks Inc	U	\$95	\$95	95-7h	U
Phippsburg	Gillies & Fallon Guide Service Inc	U				U
Unity	Maine Kayak Inc	U	115/125	\$120		U
Average				\$103.33		U

SOUTHERN MAINE

Town	Name	Usage	Fee / Day	Avg. Fee / Day	Fee / Hour	Assessed Daily Rev
Biddeford Pool	Gone with the wind	U	\$128.33	\$128.33	25/55/85-3h	U
Kennebunkport	Kennebunkport Marina	U				U
Ogunquit	Ogunquit River Plantation	U	\$65	\$65		U
Wells	World Within Sea Kayaking	U	\$70	\$70	35/45-4h	U
York Hbr	Harbor Adventures	U	\$92.75	\$92.75	53-4h	U
York Hbr	Maine Professional Guides Association	U				U
Falmouth	Maine Audubon	U				U
Unity	Maine Kayak Inc	U	115/125	\$120		U
Average				\$95.22		U

Appendix I – Boat Tour

Boat Tour Data

Source – 2004 Maine Office of Tourism, personal contacts with businesses

Town	Name	Fee / Day	Avg. of Other Fees	Total Avg. Fee / Day	Data	Avg. Usage/ Year	Avg. Usage/ Day	Assessed Daily Rev
DOWNEAST								
Bangor	American Cruise Lines			423.29	2350/2630/2995 /3120/3720-7d	U	U	U
Bar Harbor	Acadian Whale Adventures	39		39		U	U	U
Bar Harbor	Bar Harbor Whale Watching Company			U		U	U	U
Bar Harbor	Bay Ferries Ltd.	35/45/55	171.25	216.25		U	U	U
Bar Harbor	Custom Boat Tours by Sea Venture	525		525	75/hr	U	U	U
Bar Harbor	Lulu Lobster Boat Ride	25		25		U	U	U
Bar Harbor	Downeast Sailing Adventures -Schooner Rachel B. Jackson	30		30		U	U	U
Bar Harbor	Downeast Windjammer Cruises	29.5/24/37.5/16		26.75		U	U	U
Bass Harbor	Destiny Sail Charters			U		U	U	U
Bass Harbor	Island Cruises			U		U	U	U
Blue Hill	Maine Windjammer Association			U		U	U	U
Camden	Schooner Lewis R. French	145		145	405/465-3d	U	U	U
Cutler	Bold Coast Charter Company			U		U	U	U
Eastport	Harris Whale Watching			U		U	U	U
Eastport	Fairwinds Charters of Maine	150/180		165		U	U	U
Jonesport	Norton of Jonesport	60		60		U	U	U
Jonesport	Norton's Tours			U		U	U	U
Machias Bay	Machias Bay Boat Tours			U		U	U	U
Mount Desert	MDI Water Taxi & Launch Service			U		U	U	U
Mount Desert	Sea Princess Cruises			U		U	U	U
Milbridge	Robertson's Sea Tours			U		U	U	U
Northeast Harbor	Asticou Custom Charters			U		U	U	U
Old Town	Castaway Cruises			U		U	U	U
Portland	Maine Family Adventures	249.17		249.17	1495-A,1345-C-6d	U	U	U
Southwest Harbor	Hinckley Yacht Charters			U		U	U	U
Southwest Harbor	Downeast Friendship Sloop Charters Old Quarry Ocean Adventures & Campground, Inc.	300		300		U	U	U
Stonington	Maine Expressions			U		U	U	U
Stonington	Sail Away Downeast			U		U	U	U
Swans Island	Swans Island Ferry			U		U	U	U
Average				183.71			U	U
MIDCOAST								

Town	Name	Fee / Day	Avg. of Other Fees	Total Avg. Fee / Day	Data	Avg. Usage/ Year	Avg. Usage/ Day	Assessed Daily Rev
	Maine Expressions			U		U	U	U
	Sail Magic Inc.			U		U	U	U
Bangor	American Cruise Lines			302.35	2350/2630/2995/ 3120/3720-7d	U	U	U
Bath	Long Reach Cruises	70		70	A-35-4h,C-20-4h	U	U	U
Bath	M/V Seguin Cruises			U		U	U	U
Bath	Maine Charter.com			U		U	U	U
Boothbay Harbor	Balmy Days Cruises	10/20/20/30		20		U	U	U
Boothbay Harbor	Cap'N Fish's Whale Watch	28		28		U	U	U
Boothbay Harbor	Boothbay Whale Watch	28		28		U	U	U
Bremen	Muscongus Bay Cruises			U		U	U	U
Camden	Penobscot Bay Cruises	70		70	A-30-3h, C-15-3h	U	U	U
Camden	Maine Windjammer Cruises	235		235	445/495-2d	U	U	U
Camden	Schooner Lewis R. French	145		145	405/465-3d	U	U	U
Camden	Schooner Surprise	395-745/day		570		U	U	U
Camden	Windjammer Angelique	145		145	550/610-4d	U	U	U
Camden	Lively Lady Too	20/50		35		U	U	U
Camden	Schooner Olad	27		27		U	U	U
Camden	Schooner Mary Day			U		U	U	U
Edgecomb	Tideway Treks Inc	95		95	95-8h	U	U	U
Hope	Schooner Kathryn B	215		215	495/795-3d	U	U	U
New Harbor	Hardy Boat Cruises			U		U	U	U
New Harbor	Hardy III Boat Tour			U		U	U	U
Newagen	A Seasonal Therapy Cruises	160/200		180		U	U	U
Phippsburg	Gillies & Fallon Guide Service Inc			U		U	U	U
Port Clyde	Monhegan Boat Line	16/27round		21.5		U	U	U
Portland	Maine Family Adventures	249.17		249.17	1495-A,1345-C-6d	U	U	U
Rockland	North End Shipyard Schooners			U		U	U	U
Rockland	Maine Windjammer Association	235		235	445/495-2d	U	U	U
Rockland	Morning in Maine Ketch, Captain Bob Pratt	30		30		U	U	U
Rockland	One Night Windjammer Cruises – Schooner Wendameen	180		180		U	U	U
Rockland	Schooner American Eagle	144.17	100	244.17	525/635/605/575 /565/555-4d	U	U	U
Rockland	Schooner Heritage	152.5	56.25	208.75	645/575-4d	U	U	U
Rockland	Schooner Isaac H. Evans	163.33		163.33	490-3d	U	U	U
Rockland	Schooner Nathaniel Bowditch	155		155	480/450-3d	U	U	U
Rockland	Schooner Stephen Taber	141.67		141.67	425-3d	U	U	U
Rockland	Summertime Cruises	53.33		53.33	A-40-6h, C-20-6h	U	U	U

Town	Name	Fee / Day	Avg. of Other Fees	Total Avg. Fee / Day	Data	Avg. Usage/ Year	Avg. Usage/ Day	Assessed Daily Rev
Rockland	Victory Chimes	250		250	450/550-2d	U	U	U
Rockport	Schooner Heron- Wooden Boat Co. Wanderbird Wildlife Expedition Cruises	30		30		U	U	U
Rockport	/Rockport Schooner Cruises	133.33		133.33	400-3d	U	U	U
Wayne	Sea Ventures Inc	80/90/130		100		U	U	U
Southwest Harbor	Schooner Annie McGee			U		U	U	U
Thomaston	Maine Coast Custom Yacht Charters			U		U	U	U
Belfast	Gafia Yacht Charters			U		U	U	U
Belfast	Maine Dining Cruises	200		200		U	U	U
Belfast	Gafia Sailing Charters, Inc	399		399		U	U	U
Union	Maine Outdoors	212.5		212.5		100 trips	..	U
Tenants Harbor	Goddess of the Sea Cruises			5172.1		U	U	U

Average				304.24			U	U
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GREATER PORTLAND & CASCO BAY

Bangor	American Cruise Lines	423.29		423.29	2350/2630/2995 /3120/3720-7d	U	U	U
Bath	Long Reach Cruises	70		70	A-35-4h,C-20-4h	U	U	U
Chebeauge Island	Chebeague Transportation Company			U		U	U	U
Cumberland	Chase Charters			U		U	U	U
Falmouth	Cruise Maine Yacht Deliveries Freeport Sailing Adventures & Women Under Sail			U		U	U	U
Freeport	Frenchboro Ferry			U		U	U	U
Frenchboro	Tideway Treks Inc	95		95	95-8h	U	U	U
Edgecomb	Gillies & Fallon Guide Service Inc			U		U	U	U
Phippsburg	Casco Bay Lines	6/6.5/7/8/8.75/9.25	55.5	63.08		978,122	2,680	\$169,054
Portland	Odyssey-Olde Port Mariner Fleet Cruises			U		U	U	U
Portland	Downeast Duck Adventures			U		U	U	U
Portland	Lucky Catch Cruises	20		20		3080	70	\$1400
Portland	Prince of Fundy Cruises Ltd.			U		U	U	U
Portland	Maine Family Adventures	232.5		232.5	1495-A,1345-C-6d	U	U	U
Portland	Old Port Mariner Fleet			U		U	U	U
Portland	Palawan Sailing			U		U	U	U
Portland	Portland Guide Service	350		350		U	U	U
Portland	Portland Schooner Co.	25/28/35		29.33		U	U	U
South Freeport	Atlantic Seal Cruises			U		U	U	U

Average				160.4			1,375	\$220,550
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SOUTHERN MAINE

Town	Name	Fee / Day	Avg. of Other Fees	Total Avg. Fee / Day	Data	Avg. Usage/ Year	Avg. Usage/ Day	Assessed Daily Rev
Kittery	Seafari Charters			U		U	U	U
Kennebunkport	Bellatrix			U		U	U	U
Kennebunkport	Cape Arundel Cruises Inc.			U		U	U	U
Kennebunkport	First Chance Whale Watching			U		U	U	U
Kennebunkport	Indian Whale Watch			U		U	U	U
Kennebunkport	Nautilus Whale Watch			U		U	U	U
Kennebunkport	Second Change Lobster Cruises			U		U	U	U
Ogunquit	Deborah Ann Whale Watch			U		U	U	U
Ogunquit	Finestkind Scenic Cruises	11/14/20/16		15.25		U	U	U
Ogunquit	Family Travel Place			U		U	U	U
Ogunquit	Portland Guide Service	350		350		U	U	U
Bangor	American Cruise Lines	423.86		423.86	2350/2630/2995/ 3120/3720-7d	U	U	U
Lovell	White Birch Guide Service	150/175		162.5		U	U	U
Wells Hbr	Coastal and Offshore Charters	699		699	699-8h	U	U	U
Average				330.12			U	U

Appendix J – Shore Fishing

Shore Fishing Data

Source – National Oceanic and Atmospheric Administration, Marine Recreational Fisheries Statistics Survey, 2000

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
DOWNEAST																
Bar Harbor	Bar Harbor Town Pier	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Bucksworth	Bucksworth Waterfront and Dock	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Corea	Corea Coastal Port	0	0	0	0	0	3	7	7	7	3	0	0	5.40	\$0	\$0
Winter Harbor	Frazier Point	0	0	0	0	0	7	5	5	9	3	0	0	5.80	\$0	\$0
Gouldsboro	Gouldsboro Point	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Lamoine	Lamoine Beach State Park	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Lamoine	Lamoine State Park Public Launch	0	0	0	0	0	3	5	7	5	0	0	0	5.00	\$0	\$0
Trenton	Landing Behind Harbour Airport	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
East Blue Hill	Morgan Bay Boat Company	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Blue Hill	Blue Hill Pubic Landing & Launch	0	0	0	0	0	3	7	7	3	3	0	0	4.60	\$0	\$0
Castine Harbor	Castine Pubic Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Ellsworth	Ellsworth Pubic Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Sorrento	Sorrento Public Launch	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$0	\$0
Schoodic Head	Schoodic Point	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Mount Desert Island	Seal Harbor	0	0	0	0	3	3	7	7	7	3	0	0	5.00	\$0	\$0
Stonington	Somes Sound	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Stonington	Stonington Coastal Port	0	0	0	0	0	3	7	11	7	3	0	0	6.20	\$0	\$0
Surry	Surry on Patten Bay	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Trenton	Thompson Island Picnic Area	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Manset	Town Landing & Pier Public Launch	0	0	0	0	0	3	11	11	11	3	0	0	7.80	\$0	\$0
Bucksport	Verona Island Bridge	0	0	0	0	0	7	11	11	5	0	0	0	8.50	\$0	\$0
Verona Island	Verona Island Park Boat Ramp	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Bucks Harbor	BBS Lobster Company & Pier	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Bar Harbor	Bar Harbor Town Pier	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Jonesport	Beal's Bridge & Co-op	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
	Breakwater Pier	0	0	0	0	3	3	7	7	5	3	3	0	4.43	\$0	\$0
Bucksport	Bucksport Waterfront & Dock	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Dennysville	Cobscook Bay State Park	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$0	\$0
Corea	Corea Coastal Port	0	0	0	0	0	3	7	7	7	3	0	0	5.40	\$0	\$0
Dennysville	Dennys River	0	0	0	3	3	3	0	0	3	3	0	0	3.00	\$0	\$0
East Machias	East Machias River	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Eastport	Eastport Ferry Wharf & Landing	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Eastport	Fish Pier	0	0	0	0	3	3	5	5	3	3	0	0	3.67	\$0	\$0
Winter Harbor	Frazier Point	0	0	0	0	0	7	5	5	9	3	0	0	5.80	\$0	\$0
Gouldsboro	Gouldsboro Point	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Harrington	Harrington River Boat Ramp	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Jonesport	Jonesport Public Boat Access	0	0	0	0	0	3	7	7	3	0	0	0	5.00	\$0	\$0
Lamoine	Lamoine Beach State Park	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Lamoine	Lamoine State Park Public Launch	0	0	0	0	0	3	5	7	5	0	0	0	5.00	\$0	\$0
Addison	Lamsen Brook	0	0	0	3	3	3	0	0	0	0	0	0	3.00	\$0	\$0
Trenton	Landing Behind Bar Harbour Airport	0	0	0	0	0	3	3	0	3	0	0	0	3.00	\$0	\$0
Lubec	Lubec Boat Ramp	0	0	0	0	3	3	7	7	7	3	0	0	5.00	\$0	\$0
Machias	Machias River Bank	0	0	0	0	0	3	3	7	5	3	0	0	4.20	\$0	\$0
Millbridge	Milbridge Public Boat Launch	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$0	\$0
Machiasport	Mill Creek	0	0	0	0	0	3	7	7	3	0	0	0	5.00	\$0	\$0
East Blue Hill	Morgan Bay Boat Company	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Cherryfield	Narraguagus River Behind Farm	7	0	3	0	0	0	0	0	0	0	0	0	5.00	\$0	\$0
Eastport	Pleasant Point Pier	16	0	0	0	3	3	3	0	3	0	0	0	5.60	\$0	\$0
Addison	Pleasant River Boat Ramp	0	0	5	3	3	3	3	7	7	3	0	0	4.25	\$0	\$0
Calais	Public Dock- Calais	7	0	0	0	0	3	7	7	3	3	0	0	5.00	\$0	\$0
Blue Hill	Blue Hill Public Landing & Launch	0	0	0	0	0	3	7	7	3	3	0	0	4.60	\$0	\$0
Castine Harbor	Castine Harbor Public Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Ellsworth	Ellsworth Public Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Sorrento	Sorrento Pubic Launch	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$0	\$0
Lubec	Quoddy Head State Park	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$0	\$0
Roque Bluffs	Roque Bluffs State Park	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
	Roque Bluffs- Shoppee Point Rte 1A Bridge	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Millbridge	over Narraguagas River	3	0	3	3	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Schoodic Head	Schoodic Point	0	0	0	0	0	3	3	3	3	3	0	0	2.50	\$0	\$0
Mount Desert Island	Seal Harbor	0	0	0	0	3	3	7	7	7	3	0	0	5.00	\$0	\$0
Eastport	Seaview Motel	0	0	0	0	3	3	3	3	7	3	0	0	3.67	\$0	\$0
Northeast Harbor	Somes Sound	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Red Beach Calais	Saint Croix Island International Historic Site	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Robbinson	Saint Croix River (Boat Ramp)	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Stonington	Stonington Coastal Port	0	0	0	0	0	3	7	11	7	3	0	0	6.20	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Surry	Surry on Patten Bay	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Trenton	Thompson Island Picnic Area	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Machias	Town Dock- Machias	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Manset	Public Launch Town Landing & Pier Public Launch	0	0	0	0	0	3	11	11	11	3	0	0	7.80	\$0	\$0
Perry	Town Landing- Perry	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Bucksport	Verona Island Bridge	0	0	0	0	0	7	11	11	5	0	0	0	8.50	\$0	\$0
Verona Island	Verona Island Park Boat Ramp	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Stuben	Whitten Stream	0	0	0	5	3	0	0	0	0	0	0	0	4.00	\$0	\$0
Millbridge	Wyman's Pier- Adjacent Rocky Shore	0	0	0	0	3	3	11	11	11	3	0	0	7.00	\$0	\$0

Total		33	0	11	17	45	211	312	326	282	111	3	0			
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Average		0	0	0	0	1	3	4	4	4	2	0	0	3.96	\$0	\$0
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MIDCOAST

Stockton Spring	Cape Jellison	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Belfast	Foot Bridge	0	0	0	0	3	11	16	16	11	7	0	0	10.67	\$0	\$0
Belfast	Town Landing- Belfast	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Lincolnton	Town Landing- Lincolnton	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$0	\$0
Searsport	Town Landing- Searsport	0	0	0	0	3	7	16	14	11	7	0	0	9.67	\$0	\$0
Bath	Bath Public Launch	0	0	0	0	0	3	9	9	3	3	0	0	5.40	\$0	\$0
Topsham	Bay Bridge Road	7	0	3	0	0	7	0	0	0	0	0	0	5.67	\$0	\$0
Bowdoinham	Bowdoinham Public Boat Access	9	0	3	3	0	3	5	5	3	3	0	0	4.25	\$0	\$0
Phippsburg	Cranberry Point Boat Launch - Kennebec River	0	0	0	0	3	3	7	7	3	0	0	0	4.60	\$0	\$0
Topsham	Fire Station at Androscoggin River	0	0	0	0	3	7	11	11	3	0	0	0	7.00	\$0	\$0
	Griffith Head Reid State Park	0	0	0	0	3	11	16	9	7	3	0	0	8.17	\$0	\$0
Cape Small	Hermit Island Campground	0	0	0	0	0	3	5	5	3	3	0	0	3.80	\$0	\$0
Bowdoinham	Leightons	9	0	5	0	0	0	0	0	0	0	0	0	7.00	\$0	\$0
Phippsburg	Morse Cove Public Launch	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Topsham	Muddy River	7	0	7	3	3	3	3	3	3	0	0	0	4.00	\$0	\$0
	Popham Beach #4 Boat Docks	0	0	0	0	3	11	11	11	5	3	0	0	7.33	\$0	\$0
Popham Beach	Popham Beach 1	0	0	0	0	3	3	7	11	7	3	0	0	5.67	\$0	\$0
Popham Beach	Popham Beach 2- Rte 209	0	0	0	0	3	9	11	11	7	3	0	0	7.33	\$0	\$0
Popham Beach	Popham Beach 3- Rte 208	0	0	0	0	3	7	7	7	7	3	0	0	5.67	\$0	\$0
Georgetown	Reid State Park, Todds Head	0	0	0	0	3	9	11	11	9	3	0	0	7.67	\$0	\$0
Topsham	Sand Bed Camps	16	0	11	0	0	0	0	0	0	0	0	0	13.50	\$0	\$0
Woolwich	Sasanoa River	0	0	0	0	0	3	7	7	3	0	0	0	5.00	\$0	\$0
Georgetown	Sheepscot Bay Marina	0	0	0	0	3	3	11	11	3	0	0	0	6.20	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Vinalhaven Island	Dan Bickford Lobster Company	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Thomaston	Jeff's Marine	0	0	0	0	0	0	0	3	3	0	0	0	3.00	\$0	\$0
Rockland	Mechanical Street Boat Launch	0	0	0	0	0	7	7	7	3	3	0	0	5.40	\$0	\$0
Thomaston	Mill River Outlet	7	0	3	3	0	0	0	0	0	0	0	0	4.33	\$0	\$0
Port Clyde	Port Clyde Public Ramp & Docks	0	0	0	0	0	5	9	9	3	3	0	0	5.80	\$0	\$0
Thomaston	Public Landing	0	0	0	0	0	3	7	7	3	3	0	0	4.60	\$0	\$0
Rockland	Public Landing- Rockland	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Vinalhaven Island	Public Pier	0	0	0	0	0	0	7	7	7	0	0	0	7.00	\$0	\$0
Rockland	Rockland Breakwater	0	0	0	0	0	14	21	31	16	7	0	0	17.80	\$0	\$0
Rockland	Rockland Landing Marina	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Rockport	Rockport Marine Park	0	0	0	0	0	7	9	9	7	3	0	0	7.00	\$0	\$0
Sprucehead	Sprucehead Ducks- Atwood	0	0	0	0	0	11	11	11	3	3	0	0	7.80	\$0	\$0
Thomaston	St George River	11	0	3	0	0	7	7	7	7	3	0	0	6.43	\$0	\$0
Thomaston	St George River at Prison	0	0	0	0	0	7	7	3	3	3	0	0	4.60	\$0	\$0
Tenant's Harbor	Town Landing- Tenant's Harbor	0	0	0	0	0	3	3	5	3	3	0	0	3.40	\$0	\$0
Owls Head Harbor	Town Wharf- Public Launch Town Wharf's Thomaston	0	0	0	0	0	3	7	7	3	3	0	0	4.60	\$0	\$0
South Thomaston	Public Launch	7	0	7	0	0	3	3	3	3	3	0	0	4.14	\$0	\$0
Boothbay Harbor	Boothbay Harbor Marina	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
South Bristol	Coverside Inn & Marina	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Damariscotta	Damariscotta River at Rte 1 Business	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Damariscotta	Damariscotta River at Rte 1 Bridge	0	0	0	3	3	5	7	4	3	3	0	0	4.00	\$0	\$0
Westport Island	Ferry Landing- Public Launch	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
New Harbor	Fort William Henry Park	0	0	0	0	0	11	11	11	7	3	0	0	8.60	\$0	\$0
East Boothbay	Grimes Cove	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Boothbay	Hodgdon Island Kmickerkane Island Park James Eddy Camps	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$0	\$0
Dresden Mills	Eastern River	16	0	3	0	0	0	0	0	0	0	0	0	9.50	\$0	\$0
Boothbay Harbor	Lobster Co-op	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Wiscasset	Maine Yankee Landing	0	0	0	0	3	9	9	9	5	3	0	0	6.33	\$0	\$0
Waldoboro	Medomak River	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Dresden	Mitchell's Smelt Camps Muscongus Marina/ Private Launch	14	0	3	0	0	0	0	0	0	0	0	0	8.50	\$0	\$0
Bremen	Private Launch	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
New Harbor	New Harbor Coop North Edgecomb	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Davis Island	The Eddy Yacht Sales	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Newcastle	Oyster River Mouth to Salt Bay	11	0	3	3	3	0	0	0	0	0	0	0	5.00	\$0	\$0
Bristol	Round Pond- Public Launch	0	0	0	0	3	7	11	11	3	3	0	0	6.33	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Damariscotta	Salt Bay	11	0	7	0	3	3	3	3	3	3	0	0	4.50	\$0	\$0
New Harbor	Small Bros Wharf	0	0	0	0	3	3	11	11	3	3	0	0	5.67	\$0	\$0
Dresden Mills	Smith Camps	35	0	3	0	0	0	0	0	0	0	0	0	19.00	\$0	\$0
Boothbay Harbor	Southport Bridge	0	0	0	0	3	3	9	11	3	3	0	0	5.33	\$0	\$0
Waldoboro	Town Landing- Public Landing	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Damariscotta	Town Landing- Damariscotta	0	0	0	0	0	0	7	7	3	0	0	0	5.67	\$0	\$0
South Harpswell	South Harpswell Town Dock	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$0	\$0
Randolph	Mobile Station	25	0	5	3	3	3	3	3	3	3	0	0	5.67	\$0	\$0
Randolph	Baker's Camp	25	0	5	0	0	3	9	9	9	3	0	0	9.00	\$0	\$0
Randolph	Karpet Kaper	11	0	3	0	0	0	0	0	0	0	0	0	7.00	\$0	\$0
Brunswick	Crookers	14	0	7	0	0	0	3	3	3	0	0	0	6.00	\$0	\$0
Brunswick	Brunswick Public Boat Launch	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Brunswick	Sawyer Park Launch	0	0	0	0	3	3	7	7	5	3	0	0	4.67	\$0	\$0
Brunswick	First Bridge	0	0	0	0	0	3	3	5	7	0	0	0	4.50	\$0	\$0
Hallowell	Hallowell Public Landing	11	0	3	3	3	3	3	3	3	3	0	0	3.89	\$0	\$0
Gardiner	Gardiner Public Launch	0	0	3	7	7	3	3	3	7	3	0	0	4.50	\$0	\$0
Bailey Island	Land's End-Bailey Island	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
Bailey Island	Dockside Marina/Mackerel Cove	0	0	0	0	0	3	5	5	3	0	0	0	4.00	\$0	\$0
Harpswell	Prince's Store and Bridge	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Wiscasset	Wiscasset Public Launch	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0

Total		246	0	87	28	106	295	427	434	285	135	0	0			
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Average		3	0	1	0	1	4	5	6	4	2	0	0	5.44	\$0	\$0
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GREATER PORTLAND & CASCO BAY																
Cape Elizabeth	Crescent Beach	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
	Eastern Promenade															
Portland	Public Boat Launch	0	0	0	0	3	3	7	7	3	3	0	0	4.33	\$0	\$0
Falmouth	Falmouth Town Landing	0	0	0	0	3	7	9	9	5	3	0	0	6.00	\$0	\$0
Scarborough	Higgen's Beach	0	0	0	0	3	7	9	9	7	0	0	0	7.00	\$0	\$0
North Portland	Martin's Point Bridge	0	0	0	0	3	7	9	9	5	0	0	0	6.60	\$0	\$0
Scarborough	Nonesuch Public Boat Launch	0	0	0	0	0	5	7	7	3	3	0	0	5.00	\$0	\$0
	Nonesuch River															
Prouts Neck	at Winnocks Neck	0	0	0	0	3	7	7	7	5	0	0	0	5.80	\$0	\$0
Scarborough	Pine Point Harbor Town Dock	0	0	0	0	0	3	7	7	5	3	0	0	5.00	\$0	\$0
Scarborough	Prout's Neck	0	0	0	3	3	3	3	3	3	0	0	0	3.00	\$0	\$0
	Scarborough River															
Scarborough	at Prouts Neck	0	0	0	0	3	11	11	11	5	0	0	0	8.20	\$0	\$0
Scarborough	Scarborough Beach State Park	0	0	0	0	3	7	7	7	3	3	0	0	5.00	\$0	\$0
Scarborough	Scarborough River at Pine Point	0	0	0	0	0	3	7	7	9	3	0	0	5.80	\$0	\$0
Prouts Neck	Scarborough River at Railroad	0	0	0	0	3	3	7	7	3	3	0	0	4.33	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
	Snodgrass Bridge	0	0	0	0	3	5	11	11	7	3	0	0	6.67	\$0	\$0
South Freeport	South Freeport Public Boat Launch and Landing	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
South Freeport	Winslow Park	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Total		0	0	0	3	36	80	110	110	72	27	0	0			
Average		0	0	0	0	2	5	7	7	5	2	0	0	5.11	\$0	\$0

SOUTHERN MAINE

Kennebunkport	Batson River Mouth- East Back	0	0	0	0	5	5	5	5	5	0	0	0	5.00	\$0	\$0
	Biddeford Pool Beach-Saco River	0	0	0	0	3	7	9	5	3	3	0	0	5.00	\$0	\$0
York	Bridge on York River	0	0	0	0	0	3	7	7	5	3	0	0	5.00	\$0	\$0
Saco	Camp Ellis Beach	0	0	0	0	3	14	18	18	11	3	0	0	11.17	\$0	\$0
Kennebunkport	Chick's Marina	0	0	0	0	0	0	0	0	0	3	0	0	3.00	\$0	\$0
Cape Neddick	Cape Neddick Lobster Pound	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Cape Porpoise	Dock Next to Cape Porpoise	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
York Harbor	Donnell's Marina	0	0	0	0	0	3	7	7	3	0	0	0	5.00	\$0	\$0
Wells	Drakes Island Beach & Jetty	0	0	0	0	7	7	9	7	3	3	0	0	6.00	\$0	\$0
Eliot	Eliot Public Launch-Dead Duck Inn	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Kittery	Fort Foster	0	0	0	0	3	7	7	7	7	3	0	0	5.67	\$0	\$0
Kittery Point	Fort McClary Saint Memorial	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Biddeford	Fortunes Rocks to Biddeford Pool	0	0	0	0	3	7	9	9	7	3	0	0	6.33	\$0	\$0
Kennebunkport	Goose Rock Beach	0	0	0	0	3	7	7	7	7	0	0	0	6.20	\$0	\$0
Kennebunkport	Kennebunk River Mouth -East Bank	0	0	0	0	3	11	9	9	7	3	0	0	7.00	\$0	\$0
Kennebunkport	Kennebunk River Mouth- West Bank	0	0	0	0	3	5	9	9	3	3	0	0	5.33	\$0	\$0
Old Orchard Beach	Kinney Shore	0	0	0	0	7	9	3	3	3	0	0	0	5.00	\$0	\$0
Kittery Point	Kittery Point Town Wharf & Public Ramp	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
	Libby's Point	0	0	0	0	3	5	5	3	5	0	0	0	4.20	\$0	\$0
York Beach	Long Beach	0	0	0	0	3	5	5	3	3	0	0	0	3.80	\$0	\$0
Biddeford	Meeting House Eddy	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
Kennebunkport	Public Boat Launch	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$0	\$0
	Mousam River at Rte 9 Bridge	0	0	0	0	3	3	7	7	5	0	0	0	5.00	\$0	\$0
Biddeford	New England University-Saco River	0	0	0	3	3	5	9	9	5	3	0	0	5.29	\$0	\$0
Saco	Norwoods Marina	0	0	0	3	0	3	3	3	0	0	0	0	3.00	\$0	\$0
York Beach	Nubble Light	0	0	0	0	3	3	9	9	3	3	0	0	5.00	\$0	\$0
	Ocean Park-	0	0	0	0	3	3	9	9	3	3	0	0	5.00	\$0	\$0
	Brank Brook to Tioga Avenue	0	0	0	0	3	5	3	3	3	0	0	0	3.40	\$0	\$0
Ogunquit	Ogunquit (Perkins Cove)	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/ Day	Fee	Assessed Daily Rev
Moody	Ogunquit River Bridge- North End	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Kennebunkport	Parson's Beach- Mousam River West Bank	0	0	0	0	7	11	11	11	3	3	0	0	7.67	\$0	\$0
Saco	Riverside Anchorage- Season	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$0	\$0
Saco	Saco River Dam	0	0	0	3	3	7	7	7	3	3	0	0	4.71	\$0	\$0
Kittery Point	Seapoint Beach	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$0	\$0
	Short Sands Beach	0	0	0	0	3	3	5	5	7	3	0	0	4.33	\$0	\$0
South Berwick	South Berwick Public Launch	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$0	\$0
Kittery	Spruce Creek Bridge	0	0	0	0	3	5	9	9	7	3	0	0	6.00	\$0	\$0
Kittery	Traip- Public Launching Site	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Kennebunkport	Upper Mousam River - Above Meadows	0	0	0	0	3	5	5	5	3	0	0	0	4.20	\$0	\$0
Wells	Webhannet River Jetty	0	0	0	0	3	7	11	11	7	3	0	0	7.00	\$0	\$0
Wells	Wells Beach	0	0	0	0	3	11	11	11	7	3	0	0	7.67	\$0	\$0
Wells	Wells Town Dock	0	0	0	0	3	3	5	5	3	3	0	0	3.67	\$0	\$0
York	York River at Scotland	0	0	0	0	3	7	7	7	7	0	0	0	6.20	\$0	\$0
York Harbor	York River Rte 103 Causeway	0	0	0	0	3	5	5	5	5	0	0	0	4.60	\$0	\$0
York	York Rte 1 Bridge	0	0	0	0	3	5	7	7	5	0	0	0	5.40	\$0	\$0
York Harbor	York- Town Wharf	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$0	\$0
Total		0	0	0	9	125	219	262	252	184	66	0	0			
Average		0	0	0	0	3	5	6	6	4	2	0	0	4.68	\$0	\$0

Appendix K – Charter Fishing

Charter Fishing Data

Source – National Oceanic and Atmospheric Administration, Marine Recreational Fisheries Statistics Survey, 2000

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
DOWNEAST																
Jonesport	Beal's Bridge & Co-op	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Eastport	Harris Point	0	0	0	0	0	16	16	16	0	0	0	0	16.00	\$50	\$800
Total		0	0	0	0	0	23	23	23	7	0	0	0			
Average		0	0	0	0	0	12	12	12	4	0	0	0	11.50	\$50	\$575
MIDCOAST																
Bath	Bath Point Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Bath	Bath Public Launch	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Phippsburg	Cranberry Point Boat Launch - Kennebec River	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Cape Small	Hermit Island Campground	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Phippsburg	Morse Cove Public Launch	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Popham Beach	Popham Beach 3- Rte 208	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Georgetown	Reid State Park, Todds Head	0	0	0	0	0	7	7	7	7	7	0	0	7.00	\$50	\$350
Thomaston	Jeff's Marine	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Brown's Wharf	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Captain Fish Charters	0	0	0	0	0	16	16	16	16	0	0	0	16.00	\$50	\$800
Boothbay Harbor	Carousel Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Westport Island	Ferry Landing- Public Launch	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Fisherman's Wharf	0	0	0	0	0	7	7	7	7	3	0	0	6.20	\$50	\$310
East Boothbay	Grimes Cove	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Lobster Co-op	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Wiscasset	Maine Yankee Landing	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Davis Island	North Edgcomb	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	The Eddy Yacht Sales	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Ripleys Charters	0	0	0	0	0	7	7	7	7	3	0	0	6.20	\$50	\$310
Damariscotta	Town Landing- Damariscotta	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
West Boothbay Harbor	Townsend Gut	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Launching Ramp	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Boothbay Harbor	Tug Boat Inn	0	0	0	0	16	16	16	16	16	16	0	0	16.00	\$50	\$800
South Harpswell	South Harpswell Town Dock	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Wiscasset	Wiscasset Public Launch	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Total		0	0	0	0	16	179	179	179	179	29	0	0			
Average		0	0	0	0	1	9	9	9	7	1	0	0	7.71	\$50	\$386
GREATER PORTLAND & CASCO BAY																
Portland	Dimillos Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Portland	Long Wharf	0	0	0	16	16	16	16	16	16	16	0	0	16.00	\$50	\$800
Scarborough	Pine Point Harbor Town Dock	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Scarborough	Prouts Neck	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Total		0	0	0	16	16	37	37	37	37	16	0	0			
Average		0	0	0	4	4	9	9	9	9	4	0	0	9.25	\$50	\$463
SOUTHERN MAINE																
Biddeford Pool	Biddeford Pool Yacht Club	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Kennebunkport	Chick's Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
York Harbor	Donnell's Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Kittery	Fort Foster	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Saco	Norwoods Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Ogunquit	Ogunquit (Perkins Cove)	0	0	0	16	16	16	16	16	16	16	0	0	16.00	\$50	\$800
Ogunquit	Ogunquit Ugly Anne P.C.	0	0	0	0	16	16	16	16	16	16	0	0	16.00	\$50	\$800
Kennebunkport	Performance Marina	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Biddeford	Rumery's Boatyard- Saco River	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Saco	Saco River Public Boat Access	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Saco	Saco Yacht Club- Private Launch	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Kittery	Traip- Public Launching Site	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
York Harbor	York Harbor Marina Service & Dock 2	0	0	0	0	0	3	7	7	5	0	0	0	5.50	\$50	\$275
York Harbor	York- Town Wharf	0	0	0	0	0	7	7	7	7	0	0	0	7.00	\$50	\$350
Total		0	0	0	16	32	112	116	116	114	32	0	0			
Average		0	0	0	1	2	8	8	8	8	2	0	0	8.19	\$50	\$409

Appendix L – Private Fishing

Private Fishing Data

Source – National Oceanic and Atmospheric Administration, Marine Recreational Fisheries Statistics Survey, 2000

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
DOWNEAST																
Bar Harbor	Bar Harbor Town Pier	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Bucksworth	Bucksworth Waterfront and Dock	0	0	0	0	0	3	5	5	5	3	0	0	4.20	\$50	\$105
Winter Harbor	Frazier Point	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
Gouldsboro	Gouldsboro Point	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$50	\$75
Lamoine	Lamoine State Park Public Launch	0	0	0	0	0	3	5	9	9	0	0	0	6.50	\$50	\$163
Trenton	Landing Behind Harbour Airport	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
East Blue Hill	Morgan Bay Boat Company	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Blue Hill	Blue Hill Pubic Landing & Launch	0	0	0	0	0	3	7	5	3	0	0	0	4.50	\$50	\$113
Castine Harbor	Castine Pubic Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Ellsworth	Ellsworth Pubic Landing & Launch	0	0	0	0	0	3	5	7	7	0	0	0	5.50	\$50	\$138
Sorrento	Sorrento Public Launch	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
Mt Dessert Island	Seal Harbor	0	0	0	0	3	3	7	7	3	3	0	0	4.33	\$50	\$108
Stonington	Stonington Coastal Port	0	0	0	0	0	3	5	7	7	3	0	0	5.00	\$50	\$125
Surry	Surry on Patten Bay	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Manset	Town Landing & Pier Public Launch	0	0	0	0	0	7	14	14	14	3	0	0	10.40	\$50	\$260
Verona Island	Verona Island Park Boat Ramp	0	0	0	0	0	7	11	11	7	3	0	0	7.80	\$50	\$195
Bar Harbor	Bar Harbor Town Pier	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Jonesport	Beal's Bridge & Co-op	0	0	0	0	3	0	0	0	0	0	0	0	3.00	\$50	\$75
	Breakwater Pier	0	0	0	0	0	3	7	7	5	3	3	0	4.67	\$50	\$117
Bucksport	Bucksport Waterfront & Dock	0	0	0	0	0	3	5	5	5	3	0	0	4.20	\$50	\$105
Dennysville	Cobscook Bay State Park	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$50	\$75
Dennysville	Dennys River	0	0	0	0	0	3	0	0	3	3	0	0	3.00	\$50	\$75
East Machias	East Machias River	0	0	0	0	3	0	0	0	0	0	0	0	3.00	\$50	\$75
Eastport	Eastport Ferry Wharf & Landing	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Eastport	Fish Pier	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Winter Harbor	Frazier Point	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
Gouldsboro	Gouldsboro Point	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$50	\$75
Harrington	Harrington River Boat Ramp	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Jonesport	Jonesport Public Boat Access	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Lamoine	Lamoine Beach State Park	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Lamoine	Lamoine State Park Public Launch	0	0	0	0	0	3	5	9	9	0	0	0	6.50	\$50	\$163
Addison	Lamsen Brook	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Trenton	Landing Behind Bar Harbour Airport	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Lubec	Lubec Boat Ramp	0	0	0	0	3	7	7	7	7	3	0	0	5.67	\$50	\$142

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Machias	Machias River Bank	0	0	0	0	0	0	0	7	0	0	0	0	7.00	\$50	\$175
Millbridge	Millbridge Public Boat Launch	0	0	0	0	0	3	5	5	5	3	0	0	4.20	\$50	\$105
Machiasport	Mill Creek	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Machiasport	Morgan Bay Boat Company	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Cherryfield	Narraguagus River Behind Farm	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Eastport	Pleasant Point Pier	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Addison	Pleasant River Boat Ramp	0	0	0	0	3	3	9	9	9	3	0	0	6.00	\$50	\$150
Calais	Public Dock- Calais	0	0	0	0	0	7	7	7	7	3	0	0	6.20	\$50	\$155
Blue Hill	Blue Hill Public Landing & Launch	0	0	0	0	0	3	7	5	3	0	0	0	4.50	\$50	\$113
Castine Harbor	Castine Harbor Public Landing & Launch	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Ellsworth	Ellsworth Public Landing & Launch	0	0	0	0	0	3	5	7	7	0	0	0	5.50	\$50	\$138
Sorrento	Sorrento Pubic Launch	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
Roque Bluffs	Roque Bluffs State Park	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
	Roque Bluffs- Shoppee Point	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Millbridge	Rte 1A Bridge over Narraguagus River	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Schoodic Head	Schoodic Point	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Mount Desert Island	Seal Harbor	0	0	0	0	3	3	7	7	3	3	0	0	4.33	\$50	\$108
Eastport	Seaview Motel	0	0	0	0	3	3	7	7	7	3	0	0	5.00	\$50	\$125
Northeast Harbor	Somes Sound	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Red Beach Calais	Saint Croix Island Historic Site	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Robbinson	Saint Croix River (Boat Ramp)	0	0	0	0	3	5	5	5	5	3	0	0	4.33	\$50	\$108
Stonington	Stonington Coastal Port	0	0	0	0	0	3	5	7	0	3	0	0	4.50	\$50	\$113
Surry	Surry on Patten Bay	0	0	0	0	0	3	3	3	7	0	0	0	4.00	\$50	\$100
Trenton	Thompson Island Picnic Area	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Machias	Town Dock- Machias Public Launch	0	0	0	0	3	3	5	5	3	3	0	0	3.67	\$50	\$92
Manset	Town Landing & Pier Public Launch	0	0	0	0	0	7	14	14	14	3	0	0	10.40	\$50	\$260
Perry	Town Landing- Perry	0	0	0	0	3	7	7	7	7	3	0	0	5.67	\$50	\$142
Bucksport	Verona Island Bridge	0	0	0	0	0	7	0	0	0	0	0	0	7.00	\$50	\$175
Verona Island	Verona Island Park Boat Ramp	0	0	0	0	0	0	11	11	7	3	0	0	8.00	\$50	\$200
Stuben	Whitten Stream	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Millbridge	Wyman's Pier- Adjacent Rocky Shore	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
Total		0	0	0	0	33	177	255	274	225	72	3	0			
Average		0	0	0	0	1	3	4	4	3	1	0	0	3.75	\$50	\$94
MIDCOAST																
Stockton Spring	Cape Jellison	0	0	0	0	3	3	5	5	3	3	0	0	3.67	\$50	\$92
Belfast	Town Landing- Belfast	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Lincolnvillev	Town Landing - Lincolnvillev	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Searsport	Town Landing- Searsport	0	0	0	0	3	9	14	14	14	3	0	0	9.50	\$50	\$238
Bath	Bath Port Marina	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$50	\$75
Bath	Bath Public Launch Cranberry Point Boat Launch	0	0	0	0	3	5	7	9	11	3	0	0	6.33	\$50	\$158
Phippsburg	- Kennebec River	0	0	0	0	0	7	11	11	3	0	0	0	8.00	\$50	\$200
Bowdoinham	Bowdoinham Public Boat Access	0	0	0	0	0	3	5	5	3	3	0	0	3.80	\$50	\$95
Cape Small	Hermit Island Campground	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Cape Small	Hermit Island Charter	0	0	0	0	0	3	5	5	3	0	0	0	4.00	\$50	\$100
Phippsburg	Morse Cove Public Launch	0	0	0	0	3	16	21	21	21	3	0	0	14.17	\$50	\$354
	Popham Beach #4 Boat Docks	0	0	0	0	3	3	7	7	7	3	0	0	5.00	\$50	\$125
Georgetown	Robinhood Marina	0	0	0	0	0	3	3	3	0	0	0	0	3.00	\$50	\$75
Woolwich	Sasanoa River	0	0	0	0	0	3	0	0	0	0	0	0	3.00	\$50	\$75
Georgetown	Sheepscot Bay Marina	0	0	0	0	3	3	5	5	3	0	0	0	3.80	\$50	\$95
Camden	Camden Public Landing	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Vinalhaven Island	Dan Bickford Lobster Company	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$50	\$75
Thomaston	Jeff's Marine	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Rockland	Mechanical Street Boat Launch	0	0	0	0	0	12	14	11	7	3	0	0	9.40	\$50	\$235
Thomaston	Mill River Outlet	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Port Clyde	Port Clyde Public Ramp & Docks	0	0	0	0	0	5	7	7	3	3	0	0	5.00	\$50	\$125
Thomaston	Public Landing	0	0	0	0	0	14	14	14	11	3	0	0	11.20	\$50	\$280
Rockland	Public Landing- Rockland	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Vinalhaven Island	Public Pier	0	0	0	0	0	0	7	7	7	0	0	0	7.00	\$50	\$175
Rockland	Rockland Breakwater	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Rockland	Rockland Landing Marina	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Rockport	Rockport Marine Park	0	0	0	0	0	11	9	9	7	3	0	0	7.80	\$50	\$195
Sprucehead	Sprucehead Ducks- Atwood	0	0	0	0	0	3	0	0	0	0	0	0	3.00	\$50	\$75
Thomaston	St George River	0	0	0	0	0	0	3	3	0	0	0	0	3.00	\$50	\$75
Thomaston	St George River at Prison	0	0	0	0	0	0	0	0	0	0	0	0	0.00	\$50	\$0
Tenant's Harbor	Town Landing- Tenant's Harbor	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
Owls Head Harbor	Town Wharf- Public Launch	0	0	0	0	0	3	3	5	3	3	0	0	3.40	\$50	\$85
South Thomaston	Town Wharf's Thomaston Launch	0	0	0	0	0	5	5	5	3	3	0	0	4.20	\$50	\$105
Boothbay Harbor	Brown's Wharf	0	0	0	0	0	3	11	9	3	0	0	0	6.50	\$50	\$163
Boothbay Harbor	Carousel Marina	0	0	0	0	0	3	7	7	7	0	0	0	6.00	\$50	\$150
Boothbay	Coastal Port Ferry	0	0	0	0	0	0	3	3	3	0	0	0	3.00	\$50	\$75
South Bristol	Coverside Inn & Marina	0	0	0	0	3	3	3	5	5	3	0	0	3.67	\$50	\$92
Westport Island	Ferry Landing- Public Launch	0	0	0	0	3	3	7	7	5	3	0	0	4.67	\$50	\$117
Boothbay Harbor	Fisherman's Wharf	0	0	0	0	0	3	3	3	3	3	0	0	3.00	\$50	\$75
New Harbor	Fort William Henry Park	0	0	0	0	3	11	11	11	11	3	0	0	8.33	\$50	\$208
East Boothbay	Grimes Cove	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Boothbay	Hodgdon Island Kmickerkane Park	0	0	0	0	3	9	9	9	7	0	0	0	7.40	\$50	\$185
Boothbay Harbor	Lobster Co-op	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$50	\$75
Wiscasset	Maine Yankee Landing	0	0	0	0	3	11	11	7	7	3	0	0	7.00	\$50	\$175
Waldoboro	Medomak River	0	0	0	0	3	3	5	5	0	0	0	0	4.00	\$50	\$100
Bremen	Muscongus Marina/Private Launch	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
New Harbor	New Harbor Coop	0	0	0	0	3	5	5	5	5	3	0	0	4.33	\$50	\$108
Davis Island	North Edgcomb/Eddy Yacht Sales	0	0	0	0	3	5	5	5	5	3	0	0	4.33	\$50	\$108
Bristol	Round Pond- Public Launch	0	0	0	0	3	7	9	9	5	3	0	0	6.00	\$50	\$150
New Harbor	Small Bros Wharf	0	0	0	0	3	3	5	5	3	3	0	0	3.67	\$50	\$92
Waldoboro	Town Landing- Public Landing	0	0	0	0	3	3	5	5	5	0	0	0	4.20	\$50	\$105
Damariscotta	Town Landing- Damariscotta	0	0	0	0	3	3	9	9	3	3	0	0	5.00	\$50	\$125
West Boothbay Hbr	Townsend Gut Launching Ramp	0	0	0	0	3	3	7	9	3	0	0	0	5.00	\$50	\$125
Brunswick	First Bridge	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Gardiner	Gardiner Public Boat Launch	0	0	0	3	7	9	9	9	7	3	0	0	6.71	\$50	\$168
Hallowell	Hallowell Public Landing	0	0	0	3	3	5	5	5	3	3	0	0	3.86	\$50	\$96
Randolph	Mobile Station	0	0	0	3	3	3	3	3	3	3	0	0	3.00	\$50	\$75
Brunswick	Brunswick Public Boat Launch	0	0	0	0	3	7	9	9	3	3	0	0	5.67	\$50	\$142
Bailey Island	Dockside Marina/Mackerel Cove	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
Bailey Island	Mackerel Cove Public Launch	0	0	0	0	3	5	5	5	5	0	0	0	4.60	\$50	\$115
Brunswick	New Meadows Marina	0	0	0	0	3	3	9	9	7	3	0	0	5.67	\$50	\$142
Harpswell	Prince's Store and Bridge	0	0	0	0	3	3	7	7	3	0	0	0	4.60	\$50	\$115
Brunswick	Sawyer Park Launch	0	0	0	0	3	3	7	9	5	3	0	0	5.00	\$50	\$125
Randolph	Baker's Camp	0	0	0	0	0	9	14	14	5	3	0	0	9.00	\$50	\$225
South Harpswell	Dolphin Marine Service	0	0	0	0	0	5	9	9	5	3	0	0	6.20	\$50	\$155
South Harpswell	South Harpswell Town Dock	0	0	0	0	0	3	3	3	3	0	0	0	3.00	\$50	\$75
Wiscasset	Wiscasset Public Launch	0	0	0	0	3	7	7	7	7	3	0	0	5.67	\$50	\$142
Total		0	0	0	9	100	290	389	390	284	111	0	0			
Average		0	0	0	0	1	4	6	6	4	2	0	0	4.62	\$50	\$115
GREATER PORTLAND & CASCO BAY																
Portland	Dimillos Marina	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
Falmouth	Falmouth Town Landing	0	0	0	0	3	7	7	7	5	3	0	0	5.33	\$50	\$133
Portland	Long Wharf	0	0	0	0	3	3	3	3	0	0	0	0	3.00	\$50	\$75
Scarborough	Prout's Neck	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
South Portland	South Portland Public Launch	0	0	0	0	3	9	14	14	9	3	0	0	8.67	\$50	\$217
Scarborough	Scarboro River at Prouts Neck	0	0	0	0	0	7	5	5	3	0	0	0	5.00	\$50	\$125
Yarmouth	Yarmouth Boat Yard	0	0	0	0	3	3	5	5	3	0	0	0	3.80	\$50	\$95
Yarmouth	Yarmouth Public Boat Landing	0	0	0	0	0	9	9	9	9	3	0	0	7.80	\$50	\$195
Portland	Eastern Promenade Public Launch	0	0	0	0	0	9	14	14	9	3	0	0	9.80	\$50	\$245

Town	Name	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Avg. Usage/Day	Fee	Assessed Daily Rev
Scarborough	Nonesuch Public Boat Launch	0	0	0	0	0	5	7	7	3	3	0	0	5.00	\$50	\$125
Prouts Neck	Nonesuch River at Winnocks Neck	0	0	0	0	0	3	5	5	3	0	0	0	4.00	\$50	\$100
Scarborough	Pine Point Harbor Town Dock	0	0	0	0	0	7	9	9	5	3	0	0	6.60	\$50	\$165
South Freeport	South Freeport Launch/Landing	0	0	0	0	0	7	9	9	7	3	0	0	7.00	\$50	\$175
South Portland	Spring Point Boat Marina	0	0	0	0	0	7	9	9	9	3	0	0	7.40	\$50	\$185
South Freeport	Winslow Park	0	0	0	0	0	5	7	7	3	3	0	0	5.00	\$50	\$125
Total		0	0	0	0	18	87	109	109	74	27	0	0			
Average		0	0	0	0	1	6	7	7	5	2	0	0	5.63	\$50	\$141
SOUTHERN MAINE																
Deepwater	Arundel Boat Yard	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$50	\$75
	Biddeford Pool Beach- Saco River	0	0	0	0	0	3	5	5	3	3	0	0	3.80	\$50	\$95
Biddeford Pool	Biddeford Pool Yacht Club	0	0	0	0	0	3	5	5	7	0	0	0	5.00	\$50	\$125
Saco	Camp Ellis Beach	0	0	0	0	5	5	7	7	3	3	0	0	5.00	\$50	\$125
Cape Neddick	Cape Neddick Lobster Pound	0	0	0	0	3	5	3	3	3	0	0	0	3.40	\$50	\$85
Kennebunkport	Chick's Marina	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$50	\$75
Cape Porpoise	Dock Next to Cape Porpoise	0	0	0	0	3	3	3	3	0	0	0	0	3.00	\$50	\$75
York Harbor	Donnell's Marina	0	0	0	3	5	5	7	7	5	3	0	0	5.00	\$50	\$125
Eliot	Eliot Public Launch / Dead Duck Inn	0	0	0	3	5	14	14	14	7	3	0	0	8.57	\$50	\$214
Eliot	Great Cove Boat Club	0	0	0	3	5	5	11	11	3	3	0	0	5.86	\$50	\$146
Kittery Point	Kittery Point Town Wharf & Public Ramp	0	0	0	25	5	9	9	9	3	3	0	0	9.00	\$50	\$225
Biddeford	Meeting House Eddy Public Boat Launch	0	0	0	0	5	14	18	19	7	3	0	0	11.00	\$50	\$275
Kennebunkport	Mousam River at Rte 9 Bridge	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
Biddeford	NE University - Saco River	0	0	0	0	0	3	3	5	0	0	0	0	3.67	\$50	\$92
Saco	Norwoods Marina	0	0	0	0	3	5	9	9	7	3	0	0	6.00	\$50	\$150
Ogunquit	Ogunquit (Perkins Cove)	0	0	0	3	3	3	3	3	3	0	0	0	3.00	\$50	\$75
Saco	Riverside Anchorage- Season	0	0	0	0	3	5	9	9	9	0	0	0	7.00	\$50	\$175
Biddeford	Rumery's Boatyard- Saco River	0	0	0	0	3	9	9	11	9	3	0	0	7.33	\$50	\$183
Saco	Saco River Public Boat Access	0	0	0	3	3	9	9	9	7	3	0	0	6.14	\$50	\$154
Saco	Saco Yacht Club- Private Launch	0	0	0	3	3	3	3	3	3	3	0	0	3.00	\$50	\$75
South Berwick	South Berwick Public Launch	0	0	0	0	3	3	5	7	7	3	0	0	4.67	\$50	\$117
Kittery	Traip- Public Launching Site	0	0	0	0	3	3	3	3	3	3	0	0	3.00	\$50	\$75
Wells	Wells Town Dock	0	0	0	3	5	3	9	9	3	3	0	0	5.00	\$50	\$125
York Harbor	York Hbr Marina Service & Dock 2	0	0	0	0	3	3	5	7	5	0	0	0	4.60	\$50	\$115
York	York River at Scotland	0	0	0	0	3	3	3	3	3	0	0	0	3.00	\$50	\$75
York Harbor	York- Town Wharf	0	0	0	0	3	0	7	7	0	0	0	0	5.67	\$50	\$142
Total		0	0	0	46	83	127	168	177	109	48	0	0			
Average		0	0	0	0	1	4	5	5	4	1	0	0	5.03	\$50	\$126

Appendix M – List of Reviewers

List of Reviewers

Name	Title	Org
Frank Csulak	Field Coordinator	NOAA Office of Response & Restoration
Charlie Colgan	Professor of Public Policy	University of Southern Maine, Muskie School of Public Service
Tracy Hart	Marine Extension Associate	Maine Sea Grant
Natalie Springuel	Marine Extension Associate	Maine Sea Grant
Kathleen Leyden	Director	Maine Coastal Program Director
Peter Slovinsky	Coastal Geologist	Department of Conservation