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# Personal Watercraft: Boon or Bane?

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## I. Introduction

The term "personal watercraft" (PWC) refers to a category of boats that at an average price of \$5,700 remain affordable for a large audience (Whiteman, 1997). The first personal watercraft resembled a snowmobile and was introduced by Bombardier in 1968. Kawasaki introduced the first commercially successful personal watercraft, the Jet Ski, in 1973 (Donheffner, 1997). These first PWC were "stand-up" models requiring the user to possess a good deal of athleticism. The PWC industry escalated with Yamaha's re-introduction of sit-down models. The sit-down models remain the most popular. In fact, as reported by the Personal Watercraft Industry Association, the sit-down style PWC represented 97% of all PWC sales in 1995 (PWIA, 1997).

The National Association of State Boating Law Administrators (NASBLA) define personal watercraft in their Model Act for Personal Watercraft as the following.

"Personal watercraft" shall mean a vessel, less than 16 feet, propelled by a water-jet pump or other machinery as its primary source of motor propulsion which is designed to be operated by a person sitting, standing or kneeling on, rather than being operated by a person sitting or standing inside the vessel.

PWC can travel as fast as 65 miles per hour. The PWC's high speed, low cost, and easy operation have generated a boom in PWC sales. Anderson (1997) reports that between 1987 and 1996, PWC sales increased 870%. With an average of 200,000 PWC sold annually, the \$1.4 billion industry represents the most popular segment of the recreational boating industry (Bluewater Network: Protecting, 1997; Gerdes, 1996; Palmer, 1996; Whiteman, 1997).

## II. The Objections Presented by PWC Opponents

Not all stakeholders view PWC favorably. What PWC advocates view as exhilarating recreation, others view as an abomination, abhorring the resultant noise, damage to the environment, and PWC-related injuries. As expressed by Lyke (1996, p. A18), "America's eternal quest for more speed and more noise has run smack into a coalition of ecology-minded lovers of solitude." PWC opponents present seven primary arguments against PWC operations.

### A. PWC operations result in devastating injuries

Injuries involving PWC use are escalating. According to a 1997 article in the *Journal of American Medical Association*, PWC injuries treated in U.S. hospital emergency departments have increased an approximate 319% between 1990 and 1995 (Branche, Conn, and Annett, 1997, p. 663). However, even this statistic is an underrepresentation since less than "5% of all non-fatal accidents are actually reported to the states or Coast Guard" (Donheffner, 1997, p. 3). An approximate 48% of all injuries caused by PWC use, treated in U.S. hospital emergency departments, occurred in the 25-44 year age group. Thirty-eight percent of all injuries treated in U.S. hospital emergency departments occurred in the 15-24 year age group. Surprisingly, only 7% of those 14 years or under required treatment in hospital emergency departments. Lacerations (31%) and contusions (25%) were the most common ailments while the most injuries (34%) occurred to the leg and 29% of all injuries occurred to the head (Branche, Conn, and Annett, 1997, p. 663). Thirty two percent

of all injuries in 1995 occurred by falling off the PWC and 25% of all injuries occurred from collisions with other PWC (Philp, 1997). Individual state statistics reveal the magnitude of the problem.

Iowa, 1995: PWC accounted for 41% of all boating accidents although they represented only 3% of boat registrations (Palmer, 1996).

Nebraska, 1995: PWC accounted for 47% of all boating accidents although they represented only 7% of boat registrations (Palmer, 1996).

California, 1997: PWC accounted for 45% of all boating accidents although they represented only 16% of boat registrations ("Reckless Use," 1997).

New Jersey, 1996: PWC accounted for 46% of all boating accidents although they represented only 8% of boat registrations (Moore, 1997).

Illinois, 1995: PWC accounted for 44% of all boating accidents although they represented only 3.5% of boat registrations ("Boating accidents," 1996).

Michigan, 1996: PWC accounted for 41% of all boating accidents although they represented only 9% of boat registrations (Edwards, 1997).

Virginia, 1996: PWC accounted for over 33% of all boating accidents although they represented only 6% of boat registrations ("Virginia recognizes," 1997).

Injuries peaked in 1995 at 16.2 injuries per 1,000 PWC in operation (Philp, 1997). The injuries associated with PWC usage are not surprising, conclude PWC opponents. PWC can travel as fast as 65 miles per hour. Further, jumping a wake represents an airborne missile in which the user has limited, if any, steering power and no braking power upon reentry to the water (Whiteman, 1997).

Often, there is little recourse for plaintiffs injured while riding PWC or injured by others riding PWC. Five primary defenses tend to preclude recovery. *First*, insurance companies defend against recovery through exclusions (*Calif-*

*ornia Casualty Insurance Company v. Yessian*, 1996). Similarly, insurance exclusions in defendant's homeowners policy precluded coverage for injuries sustained by the plaintiff in *State Farm Fire & Casualty Company v. Guy Johnson* (1992). *Second*, claims alleging a PWC manufacturer's failure to warn have been dismissed by the court which declared the manufacturer's warning to be adequate (*Breeden, et al. v. Valencia, Inc.*, 1990). *Third*, negligent entrustment allegations against lessors of PWC also preclude relief for subsequent injury (see also *Jefferson Insurance Company v. Sea World*, 1991; *Thomas v. Prudential Property and Casualty*, 1996). *Fourth*, maritime law also precludes recovery for expenses or claims exceeding medical and funeral expenses. In *Lipworth v. Kawasaki Motors Corp., USA, et al.* (1992), the plaintiffs appealed a trial court decision which denied their claim for loss of consortium and pain and suffering when their 11 year old daughter collided with a dock while operating a PWC. The plaintiffs lost their appeal due to maritime law recovery limitations (see also *Choat v. Kawasaki*, 1996). *Fifth*, governmental immunity and protected discretionary decisions of the government served to preclude recovery in *Huff v. Golcoast Jet Ski Rentals, Inc.* (1987). Plaintiffs in *Huff* (1987) argued that the issuing of a license to Goldcoast to operate a jet ski rental business in the waterway adjacent to a no wake zone represented a dangerous condition created by the city. In denying recovery, the Florida Court of Appeals stated,

The issuance of a permit or a license has been held to be a function akin to legislative and executive office functions, which remain immune from liability because they are of the essence of governing.

Sovereign immunity protected New Mexico governmental entities named as defendants when plaintiff's son was injured after colliding with a PWC while being pulled on a rubber float behind a boat.

## **B. PWC pollute the air**

Environmentalists argue that PWC contribute to the deteriorating environment and compound existing environmental problems. The

hydrocarbons and nitrogen oxides resulting from PWC usage contribute to the already detrimental levels of ground level ozone (Environmental Fact Sheet, 1996). It is estimated that operating a PWC in excess of one hour can generate the same amount of smog-generating pollutants as driving a car 60 miles an hour for over 13 hours (Whiteman, 1997)! A study conducted by the Environmental Protection Agency (EPA) revealed that nonroad hydrocarbon emissions represent 10% of total hydrocarbon sources emitted in urban environments during the summer. Of those nonroad emissions, recreational gasoline marine engines represent 30% of the nonroad emissions (Environmental Fact Sheet, 1996). The popularity of PWC will continue to represent an increasingly large portion of the emitted nonroad emissions.

Hydrocarbons and other released byproducts influence individual health and are linked to a variety of "human pulmonary and respiratory effects, including chest pain, coughing, and shortness of breath" (Environmental Fact Sheet, 1996). The large amount of pollution generated is magnified when considering the number of hours PWC operators spend on the waters collectively throughout the United States. According to Bluewater Network (Bluewater Network: Protecting, 1997), PWC are used over two times as much as other water vessels. The extension of the PWC season via the use of wet suits intensifies the environmental damage created by PWC usage. PWC opponents argue that the regulation of the PWC industry is imperative to the preservation of America's environment.

### **C. PWC pollute the water**

In addition to air pollution, PWC pollute the water in gross amounts. The PWC's two stroke engine is powered by a mixture of oil and gas. Unfortunately, the PWC discharges greater amounts of gas and oil than do other two stroke engines (Bluewater Network: Protecting, 1997). Bluewater Network (1997) estimates that a PWC ridden for two hours discharges "2.5 gallons of gas and oil into the water." Others conclude that 30% of the PWC's unburned fuel remains in the water (Whiteman, 1997). As mentioned

earlier, the water pollution caused by PWC is magnified when considering that PWC are used two times as much as other water vessels (Bluewater Network: Protecting, 1997).

Damage to the ecosystem is intensified since PWC, in comparison to larger water vessels, can travel in shallow waters which serve as nursery grounds for various marine wildlife (e.g., fish eggs, larvae, algae, crab, mussels, shrimp, and zooplankton). The water pollution originating from PWC, PWC opponents argue, devastates marine environments as the released hydrocarbons from the gas and oil mixture settle in the shallow ecosystems of the waters. The shallow waters, containing various sea grasses and other delicate nursery grounds, are subject to the damaging effects of PWC pollutants. The destruction is intensified since the oil and gas discharges occur during the summer months when "reproduction and early development takes place within these aquatic nurseries" (Bluewater Network: America's #1 Source, 1997). As noted earlier, the high use of PWC and the rapid increase in sales each year, alarms environmentalists and other PWC opponents.

### **D. PWC create excessive noise pollution**

One PWC can emit an approximate 85-105 decibels of noise (Bluewater Network: Protecting, 1997; Whiteman, 1997). Hearing protection is recommended by the American Hospital Association when sound levels exceed 85 decibels (Bluewater Network: Protecting, 1997). Environmentalists and other PWC opponents argue that noise disturbances are compounded by multiple users and the constant variation of noise and pitch levels. For example, multiple PWC operating simultaneously, coupled with the noise variations resulting from PWC jumping wakes, causes the noise pitch to increase and decrease in an annoying manner (Lydecker, 1997). Many describe the noise as that heard by "whining chain saws and amplified mosquitoes" (Lyke, 1996, p. A18).

PWC cause both human and nonhuman disturbances. The ability to enjoy the sounds of birds, running water, winds blowing through the trees, and other peaceful pleasures is radically

disrupted by PWC operations. The Park Service refers to a study conducted by Colorado State supporting the argument that the noise created by PWC is disruptive. As indicated by the CSU study, in excess of "70% of U.S. citizens consider "peace and quiet" important features of national parks" (Whiteman, 1997, p. 24).

PWC also create disturbances for others besides individuals seeking a quiet retreat from the hustle of daily living. The noise damage to marine life is of as great, or greater, significance to PWC opponents. PWC opponents argue that noise can disrupt breeding cycles and cause birth defects for surrounding birds, mammals, and other marine life (Bluewater Network: Protecting, 1997; Commander Bob, 1996).

### **E. PWC curtail needed economic activity**

PWC may discourage individuals from participating in traditional recreational activities. For example, PWC operations drastically dilute the quality of the fishing experience as waves generated from PWC operating in close proximity place the stability of fishing boats in peril. In fact, at times the fishing boats become the subject of harassment for PWC operators as they aim for the boats at full speed and then only at the last minute do they abruptly turn 90 degrees to avoid direct impact. The fishing boats are left unstable, the fish are disturbed, and the people fishing are left soaked from the spray of the PWC.

The dilution of fishing participation, for example, would significantly impact local economic activity. As stated by Buckley (1998, p. B1), "More people fish than play golf or tennis combined." According to the American Sportfishing Association, "35.3 million anglers spent \$38 billion directly on fishing trips and gear in 1996." The state of Arkansas generated approximately \$18.6 million dollars alone from related licenses ("Game and Fish Licenses," 1997). Jensen (1995, p. 127) also estimates that the "average tourist spends about \$50 per day. Figuring a 6% sales tax, this amounts to about \$3 per tourist per day in state tax revenue." A 1987 study by Straus and Lord revealed that the Pennsylvania state park system generated \$26.97

million dollars alone from fishing. This does not include money spent on complimentary goods. As argued by PWC opponents, unregulated and/or continued operation of PWC threaten the continuation of revenues spent and taxes generated, for example, in local retail stores, gas stations, restaurants, and lodging. Fishing enthusiasts don't return to places where the fishing is poor or where the enjoyment is disruptive.

### **F. PWC contribute to eroding shorelines**

PWC operating close to shorelines can destroy reeds, kelp forests, sea grasses, coral, and mangroves that help prevent the erosion of rivers, lakes and oceans. Destroying mangroves and other shoreline grasses also disrupts nesting shore birds such as pelicans and roseate spoonbills. Further, eroding shorelines present an additional worry to riparian landowners as encroaching acreage can dilute property values and increase concerns of flooding and rising waters.

### **G. PWC can destroy and/or harass endangered species**

The Endangered Species Act of 1973 was created to protect wild life close to extinction. The brown pelican, manatee, southern sea otter, and the wood stork represent endangered species harassed by PWC. As witnessed by Scott Kathey, Program Specialist with the National Oceanic & Atmospheric Administration, PWC users in the Monterey Bay area apparently found it "fun" to run down sea otters, not once — but twice, with their thrill vehicles. Others describe the travesty associated with PWC from their observations of PWC operators "chasing eagles off logs, zooming through flagged scuba-diving zones, harassing kayakers and swarming after ferries to "shred their wakes" (Lyke, 1996, p. A18).

## **III. The Legal Right to Regulate**

The problems presented by PWC are vast. Yet, to the relief of the environmentalists, ripar-

ian land owners, and boating enthusiasts who view PWC operators as a dangerous nuisance, opportunities for government intervention and regulation are well supported. The ability to regulate the waters to preserve wild life is well stated by Sax in his 1989 article, "The limits of private rights in public waters." As explained by Sax (1989, p. 482),

The roots of private property in water have simply never been deep enough to vest in water users a compensable right to diminish lakes and rivers or to destroy the marine life within them. Water is not like a pocket watch or a piece of furniture, which an owner may destroy with impunity. The rights of use in water, however long standing, should never be confused with more personal, more fully owned property.

PWC opponents argue that the preservation and protection of wildlife should not be jeopardized by PWC users. The following elaborates on why and how regulation would be legally binding.

### **A. States Retain the Rights to Regulate the Waters**

The federal government initially took control over the waters in accordance with the constitutional rights provided by the commerce clause. As new states were recognized and created, however, "the federal government transferred the beds of navigable rivers and lakes . . . to the states in their sovereign capacity" (Munroe, 1961, p. 460). Early courts pondered on whether recreational pursuits qualified as "navigation" which could be protected by state statute. Navigability tends to be defined very loosely. In the early days, the "sawlog" test was used (Waite, 1961). In other words, a body of water was "navigable" if a log could float downstream. An early 1893 case recognized the latitude given to the definition of navigability. In *Lamprey v. Metcalf* (1893, p. 1143), the supreme court of Minnesota stated,

Certainly, we do not see why boating or sailing for pleasure should not be considered navigation . . . Many, if not the most, of the meandered lakes of this state, are not adapted to, and probably will never

be used to any great extent for, commercial navigation; but they are used — and as population increases, and towns and cities are built up in their vicinity, will be still more used — by the people for sailing, rowing, fishing, fowling, bathing, cultural, and even city purposes. . . and other public purposes which cannot now be enumerated or even anticipated. To hand over all these lakes to private ownership, under any old or narrow test of navigability, would be a great wrong upon the public for all time, the extent of which cannot, perhaps, be now even anticipated.

Even when title beds are privately owned, states have taken control to the surface use of the waters through the exercise of police power or by "finding an easement in favor of the state" (Reis, 1967, p. 170).

Courts, however, will recognize private control of the lakes in three situations (Reis, 1967). First, where the riparian land owner has a judicial title to the use of the bed. Individuals failing to secure approval of the riparian land owner prior, for example, to building a dock or harbor, are subject to claims of trespass (*Swartz v. Sherston*, 1941; *Duval v. Thomas*, 1959; *Burt v. Munger*, 1946). Second, "where title to the bed has been segregated from shore ownership by express reservation in a deed" (Reis, 1967, p. 173, quoting from *Smoulter v. Boyd*, 1904). Third, where a single owner has title to all land surrounding the lake (*McGahhey v. McCollum*, 1944; *Sanders v. De Rose*, 1934; *Putnam v. Kinney*, 1929).

Law professor Graham Waite predicted the increasing role of government in the regulation of water sports as early as 1961. As stated by Waite (1961, p. 428),

Clearly the freedom of action of boaters and other water sportsmen must be limited in such a way as to minimize the extent to which each activity interferes with the others, in order to afford to each sportsman the optimum enjoyment of his sport possible. *Failure to impose appropriate limitations will tend to destroy the sport of all, hence limitations are essential to give substantial value to freedom. Probably most*

people today expect government to impose the regulations (emphasis added).

There is significant legal precedent that justifies state legislation to regulate PWC use. All but five states have some form of legislation regulating PWC usage ("Across the USA," 1998). Commonalities among states include the following (Commander Bob, 1996; NASBLA Reference to State Boating Laws, 1996; Kansas Dept. of Wildlife and Parks, 1996):

- 47 states require operators and passengers to wear PFDs
- 45 states set a minimum age for PWC operation
- 40 prohibit use during specified times throughout the day
- 36 states impose limitations on wake jumping
- 34 states require a "kill switch"
- 27 states require adult to be on board when minor is operating a PWC
- 13 states set specific speed limitations
- 3 states prohibit the pulling of a water skier
- 13 states prohibit wake jumping

State law tends to support regulation of PWC based on common law doctrines and concepts including the riparian rights doctrine, the public trust doctrine, the nuisance, and police power.

### 1. Riparian rights

Riparian rights represent rights of land owners who own land abutting the water. The riparian rights doctrine was first recognized in the 1827 landmark case, *Tyler v. Wilkinson* (Davis, 1971). Riparian rights are based either on (a) the natural flow concept or (b) the reasonable use doctrine. The natural flow concept provides the riparian with the right to have water flowing by owned property remain unchanged in both quantity or quality. The reasonable use doctrine enables riparians to make reasonable use of the waters. The two riparian rights are conflicting as many reasonable uses inevitably interrupt the water flow. Consequently, claims made by riparians tend to fall into only one of the two categories. The most frequently litigated riparian right doctrine is the reasonable use doctrine (Davis, 1971).

Under the reasonable use analysis, courts have long recognized the right of the riparian to preserve waters for "the purpose of pleasure, recreation and health" for which interference with necessitates "a remedy for an unlawful interference with its natural conditions" (*Taylor v. Tampa Coal Co.*, 1950, p. 394). Riparians argue that PWC dilute recreation and health of the waters via pollution, noise, etc. PWC users who are also riparian land owners, in turn, argue that their rights to the public waters are protected as well. As consistently held by case law, when competing riparian interests exist, a balancing test must be conducted to see whose rights are more "reasonable." Case law tends to support the arguments of the PWC opponents. As stated by the supreme court in Arkansas in *Harris v. Brooks* (1955, p. 134), "When one lawful use of water is destroyed by another lawful use the latter must yield, or it may be enjoined." *Mitchell Realty Co. v. City of West Allis* (1924) illustrates the sanctity placed on maintenance of pure water. In this case, the Supreme Court of Wisconsin ruled in favor of the plaintiff even though the defendant-city's action contributed to the progression and industrialization of the city itself. *Thompson v. Enz* (1966) further justifies the riparian's concern that PWC users should be regulated to preserve the environment, mitigate pollution, and protect marine and related wildlife. As stated by the Michigan court of appeals (p. 565),

In a proper case, a use which adversely affects the rights of other riparian owners will be enjoined. If the pleadings raise the issue that a proposed use will, for example — adversely affect the level of the lake or will contaminate the waters, spoil the view or hurt the fishing or otherwise improperly impair the rightful use of riparian owners, such proposed use may be enjoined upon proof of the fact.

As indicated by court precedent, the riparian land owner does have a legal right to seek regulation in an effort to preserve the tranquility and quality of existing waters. As noted earlier in the paper, substantial proof exists to support the factual claims of riparian owners.

### 2. The public trust doctrine

Court decisions dating back to the early 1820s have recognized protection provided to navigation, commerce, fisheries, and water quality by the common law principle known as the public trust doctrine (Johnson, 1989; Lazarus, 1986; *Martin v. Waddell*, 1842). The public trust doctrine can be traced back to Roman law "which relied heavily upon free trade and commerce" (Tannenbaum, 1985, p. 107). The government was, in essence, entrusted to regulate the land and waters to ensure that free trade and commerce were conducted in a manner that best benefited the public and the public economy at large. It should be distinguished, however, that the states did not "own" the land in a proprietary sense. As explained by Tannenbaum, 1985, p. 121),

The states were viewed as owning the land as representatives of the people, a characterization which entailed the obligation to control and regulate the land for the public benefit.

The public trust doctrine was first recognized by the Supreme Court in the 1842 case, *Martin v. Waddell*. Over time, it has become well accepted that the public interest in the waters includes recreational interests as well as the commercial activity (Ausness, 1986; Tannenbaum, 1985). The public trust doctrine gained even more power with the Supreme Court's 1892 decision in *Illinois Central Railroad v. Illinois*. In *Illinois Central*, the Supreme Court granted the judiciary the right to invalidate legislation contrary to public interest (see also *Madison v. State*, 1957; *State v. Public Service Comm.*, 1957; *State v. Village of Lake Delton*, 1979). More specifically, legislation legalizing PWC operation can be invalidated based upon public trust premises.

Statutes regulating PWC use are likely to be upheld when the legislation's benefits are viewed to outweigh the harm or limitations of the PWC user even though legislation may intrude with the rights of the PWC operator. As explained by the Court of Appeals of Wisconsin in *State v. Village of Lake Delton* (1979, p. 633),

. . . No single public interest in the use of navigable waters, though afforded the protection of the public trust doctrine, is absolute. Some public uses must yield if other

public uses are to exist at all.

Referring to the resurgence of the public trust doctrine in the 1970s that accompanied increased concerns over the environment, Lazarus explains (1986, p. 632),

Commentators first hailed the doctrine in 1970 as offering the most promising legal basis upon which individual members of the public could maintain a lawsuit to protect natural resources from needless degradation and destruction.

The public trust doctrine enables the state to regulate waterways so the best interests of society are served. Legal scholars recognize the dynamics of the public trust doctrine that serves new public needs (e.g., PWC regulations) as appropriate (Ausness, 1986). However, the preservation of recreational pursuits falls under the domain of the public trust doctrine as well.

### **3. The nuisance; a concept in tort law**

A nuisance represents a legal cause of action in tort law. The Restatement of Torts defines two types of nuisances.

*A private nuisance :*

. . . An unreasonable interference with the interest in the use and enjoyment of land.  
. . . It is distinguished from trespass in that the interference is with the use or enjoyment, rather with the interest in exclusive possession.

*A public nuisance:*

. . . An act or omission which obstructs or causes inconvenience or damage to the public in the exercise of rights common to all.

Both riparians and non-riparians could claim PWC represent either a public or private nuisance. As explained by the supreme court of Wisconsin in a 1924 case, *Mitchell Realty Co. v. City of West Allis* (p. 397),

It is true that a nuisance may be both public and private, and that a public nuisance may also become a private nuisance as to any person who is especially injured by it to any extent beyond the injury to the public.

The riparian has a seemingly obvious and legitimate claim as PWC cause noise pollution and damage the tranquility of being a lakeside

land owner. It is also plausible, however, for the non-riparian who tows a boat and launches the boat into the water through a public wharf, to allege nuisance claims against PWC users. As discussed above, non-riparian nuisance allegations could include increased injury potentials (e.g., collisions) and disruption to the tranquility of the waters (e.g., noise generated from multiple PWC operating at various speeds, jumping wakes).

Case precedent recognizes private nuisances to include a "disturbance of the comfort, convenience, or health . . . disturbance of his peace of mind, or threat of future injury;" and activities causing environmental damage (Davis, 1971, p. 740). Similarly, public nuisances can include "interferences with the public health, public safety, public peace, public comfort and public convenience." The Wisconsin supreme court, for example, held the defendant-city had created a nuisance when city improvements led to the pollution of waters as derived from contaminated sewage systems and other organic and mineral impurities.

Nuisance decisions are often made after balancing the competing interests of involved parties (Davis, 1971; Plager, 1968). As applied to the PWC issue, for example, disruption to the environment (e.g., pollution, influence on marine life, noise grievances) and surrounding citizens would be weighed against the rights of the PWC user to operate a legal product in an otherwise legal fashion. As explained by Davis (1996, p. 71), "Uses which unreasonably impinge on the rights of other(s) . . . may be limited or enjoined." Similarly, the legality of local ordinances allowing PWC operation may be challenged. As stated in *Inhabitants of Marion v. Tuell* (1914, p. 486), "In a broad sense a common nuisance is an unlawful condition. A municipality has no more right to establish such a condition than an individual."

#### **4. Police Power**

The scope of police power is broad. As stated by the Supreme Court in *Berman v. Parker* (1954, p. 32),

Public safety, public health, morality, peace and quiet, law and order—these are some of the most conspicuous examples of the

traditional application of police power. . . Yet they merely illustrate the scope of the power and do not delimit it.

Legislation regulating PWC operations appears protected as an exercise of police power. For example, in the early 1894 case of *Lawton v. Steele*, the Supreme Court recognized that legislation protecting game and fish was within the domain of police power.

The increase in environmental concerns emanating from a dynamic society has created a resurgence in government's exercise of police power. However, legislation enacted for the purpose of advancing the public interest will be scrutinized to ensure that legislation is not arbitrary, capricious, or unreasonable (*Lawton v. Steele*, 1894; Stoebuck, 1980). Debate tends to focus on the "reasonableness" of specific regulations. In *Lawton v. Steele* (1894), the Supreme Court helped clarify when governments can execute their police power. According to the Court, legislation resulting from the exercise of police power is valid when:

1. Regulation serves a public purpose;
2. Regulation is "reasonably necessary for the accomplishment of the purpose" (*Lawton v. Steele*, 1894, p. 135), and
3. Regulation is "not unduly oppressive upon individuals" regulated (*Lawton v. Steele*, 1894, p. 135).

The third element above requires "a balancing of public needs and private interests" (Stoebuck, 1980, p. 1059). As stated earlier and as applied to the PWC issue, for example, regulations prohibiting PWC operation can be argued as necessary to mitigate injuries, protect wildlife, and preserve the tranquility of the environment. Again, the *Lawton* case (1894) supports the exercise of police power to regulate PWC usage. As summarized by the Court (1894, p. 135),

The state may interfere wherever the public interests demand it, and in this particular a large discretion is necessarily vested in the legislature to determine not only what the interests of the public require, but what measures are necessary for the protection of such interests.

Jan Laitos, a law professor at the University

of Denver School of Law, recognized the probability of government initiated water regulations based upon police power rights in his 1987 article. As concluded by Laitos (1987, p. 1630), "police power regulations might be adopted at a federal or local level . . . which adversely affect water rights."

## **B. Recovery available under the Ninth, Fifth, and Fourteenth Amendments**

Cohen (1970) presents another intriguing recovery available to individuals harmed by PWC users or otherwise trying to protect the environment from PWC abuses. As stated by Cohen (1970, p. 388), the Constitution represents a "living" and "flexible" document able to reflect a progressive society. As stated by Esposito (1970, p. 47-48),

The rule of construction embodied in the Ninth Amendment could be the foundation for a declaration by the Supreme Court of a constitutional right to an uncontaminated environment. Perhaps no principle is as fundamental as the preciousness of every human life. The Fifth and Fourteenth Amendments offer no less protection to "life" than to "liberty." Surely liberty and the various rights specifically enumerated in the Constitution are meaningless abstractions if life itself is ended through pollution's often invisible but unrelenting and imminently cataclysmic environmental assault on the human body.

Individual lawsuits arguing the right to a future in a healthy, nonpolluted environment appear meritorious. In fact, Laitos (1987) specifically states that water rights are similar to other property rights. As explained by Laitos (1987, p. 1630),

A water right is considered property; as such it is a freely alienable, incorporeal right to the use of the water that is the subject of the right.

Early court precedent echoes the notion that a water right equates with a property right (Laitos, 1987). Regulations may need to be taken which infringe on the rights of PWC users. As explained by Laitos (1987, p. 1631), rules

may be necessary which are:

. . . Aimed at reducing water pollution, preserving fish and wildlife habitat or protecting recreational and aesthetic values associated with the state's water bodies. These rules may be in response to an otherwise legitimate exercise of water right which either directly degrades the environmental quality of water or indirectly harms quality by reducing the quantity of water available.

Cohen (1970) makes an analogy to *United States v. Causby* (1946) which recognized a property right denying airplanes from flying in at low air levels. Similar property and liberty rights would be also seemingly available to individuals aggravated by noise and other nuisances created by PWC.

## **C. Judicial Trends Favoring PWC Opponents**

### **1. PWIA v. Department of Commerce and the NOAA (1995)**

In March, 1995, the U.S. Appellate court (D.C. Cir.), reversing the trial court's decision, upheld the National Oceanic and Atmospheric Administration's (NOAA) decision to limit the operation of PWC to four designated zones and access routes in the Monterey Bay Marine Sanctuary. As described in a brochure published by the Monterey Bay National Marine Sanctuary,

PWCs may launch only within the identified harbors and must proceed directly to the operating zone outside each harbor through the specified access route. Zone boundaries are marked by buoys and navigation aids.

On appeal, the primary argument presented by the PWIA was the arbitrary and capricious nature of the regulation in comparison to regulations (rather, lack of regulations) imposed on other vessels. However, the appellants aptly pointed out the many distinctions between PWC and other vessels including (a) size, (b) speed, (c) maneuverability, (d) ability to operate close to the shore, and (e) resultant detrimental impact on environment and marine life.

### **2. Christ, Jr. and Christ v. Maryland Department of Natural Resources (1994)**

The Maryland Department of Natural Re-

sources passed a regulation in 1990 prohibiting PWC use by individuals under the age of 14. The plaintiffs sought a permanent injunction, arguing that the regulation violates the separation of powers requirement within Maryland's Constitution. As stated within the Maryland Declaration of Rights,

The Legislative, Executive and Judicial powers of Government ought to be forever separate and distinct from each other; and no person exercising the functions of one of said Departments shall assume or discharge the duties of any other.

In other words, it was not constitutional for the legislature to delegate enforcement authority to the Executive branch of government (i.e., the Maryland Department of Natural Resources). In holding for the defendant, the Court of Appeals stated,

When the General Assembly enacts a statute, ...the Legislature often must delegate significant authority to the executive branch which is vested with the constitutional responsibility of administering the statute. . . . This authority delegated to executive branch agencies may include a broad power to promulgate legislative-type rules or regulations in order to implement the statute.

Although not specifically addressing the content of the statute itself, the decision was a victory for PWC opponents.

#### **D. The Organic Act of 1916**

Legislation regulating PWC in the nation's parks would be in accordance with the Organic Act, passed by President Woodrow Wilson, in August, 1916. The Organic Act (16 U.S.C. § 1) created the National Park Service (NPS) whose purpose is,

To conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.

Court precedent supports the regulation of PWC by the NPS. In *Wilderness Public Rights Fund v. Kleppe* (1979, p. 1251), the NPS limited use

of the Colorado River in the Grand Canyon after concluding that "it posed a threat to the ecology of the river." The NPS allotted 92% of the total river use "to commercial concessioners of the Park Service who, for a fee, make guided trips through the canyon." Noncommercial permits were issued providing access to the remaining 8% of the river. In upholding the action of the NPS, the U.S. Court of Appeals (9th Cir.) stated, "Where several administrative solutions exist for a problem, courts will uphold any one with a rational basis" so long as solutions are not made in an arbitrary manner (*Wilderness Public*, 1979, p. 1254).

Currently, the NPS has no uniform policy regarding the use of PWC in parks although some states have adopted policies for individual parks. For example, PWC have been banned (either temporarily or permanently) in a variety of parks including Glacier, Yellowstone, and Everglades and Canada's Waterton Lakes National Park ("PWCs out of place in parks," 1997; O'Connell, 1996). Cape Cod National Seashore, Voyageurs, Big Bend, and Grand Canyon national parks are also considering restrictions and/or bans ("PWCs out of place in parks," 1997).

## **IV. The Arguments of PWC Advocates**

PWC advocates contend that PWC opponents are over-reacting. In their view, PWC opponents cite the extremes in use behavior and discriminate against PWC when these vessels represent only one type of water vehicle among many traveling on the waters. In comparison to the above, PWC advocates present four primary arguments justifying their legal rights to freely operate PWC (Egan, 1996; Lazarus, 1986).

### **A. Allegations that PWC injuries have increased significantly are misleading**

Allegations that PWC injuries have increased significantly are misleading for two primary reasons. First, the PWIA argues that injuries resulting from PWC use are exaggerated if they are not compared to the number of users. Simply to say that injuries have increased is misleading

since the number of users has also increased. Johnston, PWIA Chair and manager of public affairs at Bombardier Motor Corp., uses the following analogy to make his point. "If you drive 100,000 miles a year, your opportunity for an accident is much higher than if you drive 10,000 miles a year" (quoted in Fecteau, 1997). For example, in 1988 the national injury/death rate was 2.0/.16 per thousand. In 1993 the injury/death rate remained remarkably similar at 2.01/.08 per thousand despite the wide increase in PWC usage and popularity. Similarly, the injury/death rate in 1996 was 2.03/.06 per thousand. As illustrated, the injury rate remained rather stagnant while the fatality rate actually decreased by over 50% since 1988! This data hardly represents the alarm espoused by PWC advocates. In fact, as indicated by the statistics, 98% of all users are not injured at all! PWC advocates suggest the media has sensationalized the accidents at the expense of the remaining PWC stakeholders. As explained by Anderson (1997, p. 9),

On a national level, the PWC accident rate has not increased significantly over the last ten years while the fatality rate has slowly declined. The so called "explosion" in personal watercraft accidents is a "dud". The gross numbers have been increasing because the PWC population has been increasing. The important statistic that the media and local politicians love to ignore is that, nationally, more than 99% of PWCs are NOT involved in accidents each year. This latter factor should figure more prominently than it does in the public debate about the need for regulation. The entire controversy is being driven by accidents involving less than one per cent of the PWC population.

Second, education is an effective, and much less intrusive, manner of improving accident rates than regulations banning or prescribing use. For example, Connecticut's PWC accidents per 1,000 registrants decreased from 2.548 in 1993 to a low of 1.367 in 1995. The requirement that all boat operators study PWC safety materials, take an exam, and receive a Safe Boating Certificate is attributed to the state's decrease in PWC accidents (Cohn, 1998a).

## **B. PWC environmental allegations contain weaknesses**

Environmental allegations lodged against the PWC industry contain four oversights. First, PWC opponents argue that the ability of the PWC to travel in shallow waters harms aquatic vegetation and nurseries harvesting in shallow water sea grasses. However, as argued by the PWIA, PWC operators actually avoid the sea grasses as to do otherwise would only harm the PWC engine. As explained by the PWIA (PWC and the Environment, 1997),

If the PWC is operating in areas containing aquatic vegetation and sediments, these materials will be drawn into the jet pump, leading to a condition known as "fouling." When this happens, the jet pump is no longer capable of processing water, and the PWC's engine will shut down. The aquatic vegetation will also be pushed into the engine cooling passages, which can result in serious engine damage.

PWC certainly could travel in the shallow waters, but to do so possesses very little wisdom and would likely happen only rarely, if ever.

Second, it is discriminatory to suggest that environmental damage is caused by only the PWC two-stroke engine. Rather, if regulations do exist, they should apply to all vessels with two-stroke engines. Further, "the typical PWC carburetor never contains more than a small amount of fuel" (Guidelines, 1995). The small carburetor translates into only minimal, if any, fuel spillage since there is no fuel to spill. The fuel flow to the engine stops automatically when the engine stops (Guidelines, 1995).

Third, water vessels equipped with propellers can do much more damage to shallow vegetation and harboring nurseries than an inboard motor vessel like the PWC.

Fourth, the PWC industry has been proactive in the utilization of technology that leads to cleaner engines. By the year 2006, hydrocarbon emissions will be reduced by an approximate two-thirds.

## **C. PWC noise allegations contain weaknesses**

PWIA members argue that the noise com-

plaints associated with the PWC contain four oversights (PWC and Noise, 1997). First, noise from all boats disturb water fowl and marine life. In fact, research shows that other boats emanate a higher noise level than PWC. In fact, research by noise consultant Jim Brennan with Brown-Buntin Associates, Inc. revealed that at 50 feet, five different brands of PWC had an average decibel rating of 70.68, far below the excessive noise allegations expressed by PWC opponents (Brennen, 1992). As explained by marine police Capt. William Gronikowski, "It's interesting to note that in light of all the complaints we get about personal watercraft, their decibels are much lower than other boats" (quoted in Moore, 1996). The PWIA succinctly states, "If there are concerns about boating noise on area waterfowl and marine life, then impacts from all boats should be considered and studied — not just personal watercraft."

Second, the 85 decibal figure refers to the sound heard by the operator of the PWC. The PWC sound heard on the shore or by someone in a surrounding boat has a much lower decibal rating (PWC and Noise, 1997).

Third, the noise generated by PWC is "roughly equivalent to the noise of a city subway, or the sound level inflicted on someone cutting his lawn with a gasoline mower" (Moore, 1996). To regulate the PWC only reflects a biased intrusion discriminating against PWC.

Fourth, PWC opponents have not recognized manufacturers' progress made toward mitigating noise concerns. Manufacturing improvements have significantly reduced the noise associated with PWC operation over the past 10 years. PWC companies remain actively engaged in finding new and additional ways to reduce concerns regarding noise. In September, 1997, for example, Bombardier announced that all PWC models will have a Noise Reduction System installed by model-year 1999 ("Bombardier announces quieter watercraft," 1997).

Fifth, PWC advocates also point out that state and local laws attempt to regulate the noise level via regulations governing how close boats can travel to shore, swimmers, or other boats. Better enforcement of existing laws will curtail noise annoyances without eliminating the rights

of the PWC user.

#### **D. Curtailment of economic activity**

The PWC industry has seen great popularity and demand. Regulation or the banning of PWC would likely curtail the robust sales experienced by PWC manufacturers. A decline in PWC sales, as experienced by the manufacturers, sends a rippling effect through the economy. For example, manufacturers reduced production may cause downsizing and the loss of jobs. The unemployed individuals decrease their spending as their amount of discretionary money becomes limited. The decreased spending hurts other industries (e.g., restaurants, entertainment establishments) which depend on the consumer's dollar. This multiplier effect impacts the private industry as well as the government. The government, for example, collects fewer tax dollars (e.g., sales tax, social security monies) as a result of the decreased economic activity. Further, declining PWC sales diminish market opportunities for entrepreneurs in complementary industries such as PWC magazines, wet suits, exhibits and competitions. As argued by PWC advocates, the preservation of economic activity outweighs societal benefit(s) from PWC regulation.

#### **E. Allegations that PWC destroy shorelines are misleading**

Allegations that PWC destroy shorelines are misleading since the wake from all vessels can destroy shorelines (Guidelines, 1995). In fact, it is more likely that the larger vessels will do greater damage to a shoreline than any PWC.

#### **F. Allegations that PWC injure and/or harass endangered species are misleading**

Allegations that PWC injure and/or harass endangered species, and therefore need regulation, are misleading for two primary reasons. First, existing laws such as the Endangered Species Protection Act discussed earlier adequately provide needed protection to endangered species. To create additional regulation only enhances expenses while curtailing the rights of others. Second, other boating activities have the same potential to influence wildlife as do

PWC. For example, the National Biological Survey published in 1994 contains the abstracts of 111 articles about the disturbance of wildlife by a variety of recreational boats, not just PWC.

### **G. Subjecting the citizenship to overly intrusive government**

Many would argue that the government has become an intrusive institution, permeating all businesses with countless rules and regulations. From the height of a wall hand rail to the width of a bathroom stall, government tells businesses what to do and how to do it. Now, as it appears to the PWC industry, government action threatens to bring about the extinction of the industry and all its jobs, tax dollars generated, and multiplied economic activity.

PWC advocates argue, the PWC industry is already adequately regulated and recourse is available to injured parties. For example, the judiciary serves to decide common law as it relates to the liability of PWC manufacturers, distributors, retailers, and end-users when confronted with allegations of product liability, negligence, intentional infliction of emotional stress, breach of contract, negligent entrustment, and negligent supervision.

Further, executive agencies like the EPA exist to regulate acts that contribute to environmental pollution as they have already done with PWC. For example, in 1990, the Clean Air Act Amendments provided the EPA the authority to regulate nonroad engines and vehicles. EPA regulations require PWC manufacturers to reduce hydrocarbon emissions by an approximate 75% by the year 2006 (Long, 1997). As argued by PWC advocates, the intrusiveness of the legislation, existing remedies, and the cost of enforcement represent three good reasons why additional legislation should be avoided.

### **H. Regulation represents resistance to progress**

PWC provide users with a great source of entertainment. The progression of the industry can be compared with the automobile industry. For example, the introduction of the automobile also brought with it concerns about a polluted environment and safety. Similar to the automobile industry, the PWC industry is pro-

gressing from an industry with minimal educational knowledge about safety or individual protective equipment to an activity with no more inherent risks than driving, flying, or even football. As explained by Howard Park, Consultant and public affairs representative for Bombardier Motor Corporation (Park, 1996, p.1),

Controversy and conflict virtually always surrounds the introduction of new and innovative motorized products. The automobile was highly controversial when it was first introduced. It's popularity was bitterly resisted by horsemen and carriage makers. Motorcycles were and remain somewhat controversial, as do snowmobiles in many areas.

Given a chance, argue PWC advocates, the PWC industry will work out its deficiencies. In fact, we have already seen this happening. For example,

- The majority of states, for example, have enacted statutes governing PWC usage.
- The multitude of local and regional PWC clubs, as well as the national PWIA, offer routine safety tips to readers through a multitude of mediums including club newsletters, magazine articles, and home pages on the Internet.
- Others, such as the Chapman School of Seamanship in Florida, offer personal watercraft training and certification ("Chapman School," 1997).
- Manufacturers have altered manufacturing practices to minimize environmental, marine, and noise pollution.
- PWC dealers are collaborating with local officials, manufacturers, and trade associations on ways to best educate the buyer about ethical and safe PWC operations.

Outright bans and overly intrusive PWC regulations represent an outspoken minority that are ignoring the progressive efforts taken by the PWC industry. Similar to automobiles, there will always be a few bad drivers that cause injury and chaos to others using the roads. However, training, education, and unintrusive legislation serve to protect the rights of all PWC stakeholders.

## V. There is NO legal Right to Regulate

### A. Denial of constitutional rights

Both the Fifth and Fourteenth Amendments prohibit the denial of liberty and property without due process. PWC advocates have a meritorious cause of action since state actors are responsible for passing city or state laws banning or restricting PWC use. PWC advocates can allege that PWC regulations violate constitutional guarantees by infringing on both property rights (i.e., right to own and operate a recreational vehicle) and liberty rights (i.e., right to spend leisure time as they choose). As stated in the oral decision for *Weden II v. San Juan Coutny* (1996), the freedom of the seas and the freedom to navigate represents a long-standing constitutional right. A concern regarding the denial of rights in one area (i.e., PWC operation) is expressed by John Birkinbine, executive director of the PWIA. As stated by Birkinbine (quoted in Beckett, 1996):

Anytime you talk about a ban, it's fair to ask, 'Once you ban PWCs, where do you stop?' . . . I suspect that jet boats, which are made by close to 50 companies in the U.S., might be next . . . From there it could be high-performance craft.

The constitutionality of the infringement becomes rather subjective as the courts balance the rights of the individual versus the needed government outcomes.

PWC advocates could also lodge an argument that laws and ordinances restricting or banning the use of PWC violate constitutional guarantees of equal protection embed within the Fourteenth Amendment. Similar to the above analysis, state actors are responsible for the passage of related laws or ordinances. Fundamental rights, defined as those rights protected by the Constitution, demand strict scrutiny analysis. PWC advocates could argue that there is not a compelling reason justifying the law since there are less discriminatory means to achieve the same objective. In fact, PWC advocates point out that the PWC regulations burden an approximate 98-99% of the population

that are using PWC in a safe and responsible manner (Anderson, 1997). As explained by Anderson (1997, p. 28), "the rights of citizens who obeyed the law are restricted while the law-breakers continue to thumb their noses at authority. This would appear to be clearly arbitrary and capricious regulation." Anderson conveys the illogic disparity of treatment in his paper, "Contemporary issues in PWC litigation, legislation, and regulation." As explained by Anderson (1997, p. 27),

It is difficult to support the rationality of a speed limit for personal watercraft as necessary to protect the public safety when a traditional vessel of the same length and horsepower on the same waters is not subject to the same regulation. Such regulations are the functional equivalent of having low speed limits on interstate highways for sports cars or pickup trucks, based on a perception that their operators are more likely to speed, while other vehicles of the same size and horsepower on the same highway are subject to no speed limits at all.

As PWC advocates argue, manufacturing guidelines mitigating pollution (i.e., noise, environmental, and marine) concerns and PWC education and licensing practices represent a few of the many ways that problems associated with PWC can be curbed. These alternatives represent a fair and less intrusive way to "fix" the problem and are much more palatable to PWC advocates than laws precluding PWC operations.

### B. Case precedent precludes the interference with public rights

Case law supports the PWC advocates who argue that state, city, or local regulations interfere with their legal rights prescribed in already established federal legislation. For example, in *Buckley v. City of Redding* (1995), the court held a local ordinance prohibiting PWC from accessing and using a particular navigable waterway from a boat launch facility violated the Federal Aid in Sport Fish Restoration Act. California received funds in accordance with the Federal Aid in Sport Fish Restoration Act. Monies received were used, in part, for the construction of a

boat launch facility on the Sacramento River. The legislation, however, required fund recipients to accommodate all boats with a common horsepower. Hence, PWC regulations were held to violate the federal law since PWC were singled out while other boats with a common horsepower were not addressed.

Similarly, the defendants won their case in *Steier v. Batavia Park District* (1996). In the Batavia case, the Batavia Park District applied to the U.S. Army Corps of Engineers for a permit to build a boat launch facility. One provision of the permit, however, was the "full and free use by the public" of the navigable waters. The Appellate Court of Illinois (2nd Dis.) agreed that regulations singling out PWC are problematic. As stated by the court in *Steier v. Batavia Park District* (1996),

The problems of excessive noise and speed are not solely related to personal watercraft. We believe it is unreasonable to deny the use of the Batavia launch to users of personal watercraft and continue to allow all other watercraft of the same class...to use the launch. Instead of singling out one type of watercraft, the defendant should enact appropriate ordinances which apply to all watercraft.

The Illinois Appellate Court, Second District, held that a subsequent ordinance regulating hours that PWC could be launched violated the free access provisions within the permit itself.

## **VI. Alternative Solutions**

### **A. Ban PWC operations and allow only in select areas**

Many areas and activists advocate the ban of PWC operation. For example, an outright ban of PWC in the Gulf of the Farallones Marine Sanctuary has unanimous backing by the Marin County Supervisors and the Environmental Action Committee of West Marin. As explained by Mark Dowie, President of the Environmental Action Committee of West Marin, "Creating a marine sanctuary with no regulations on a major disturbance just defies the purpose of a ma-

rine sanctuary" (Ling, 1997). The National Oceanic and Atmospheric Administration presides over the marine sanctuary and is expected to make a decision regarding the validity of the ban in February, 1998 ("Marin County," 1997). Banning PWC to secluded and desolate areas, many argue, creates a "win-win" situation. PWC users can still recreate. Similar to a skate board park, use is limited to remote areas which are not frequented by other tourists or recreational enthusiasts. PWC opponents benefit as the waters common to the public remain free of the noise and pollutants discharged by PWC.

### **B. A Federal Statute**

States have enacted legislation in an attempt to regulate PWC on the waters. Unfortunately, each state varies slightly and the reciprocity among the states is dubious. For example, Oklahoma's law stipulates that no one under the age of 12 can operate a PWC. On the other hand, Connecticut requires all PWC operators to have completed a course and earned a certification in "safe PWC handling approved by the Commissioner of Environmental Protection." Similarly, Indiana requires individuals to be at least 15 years old and have a valid driver's license to operate a PWC. New Jersey represents another state with strict regulations. In New Jersey, PWC operators must be a minimum of 16 years old and pass a "Coast Guard-boating instruction course, pass a test, and obtain safety certificates" (Kent, 1997). New Jersey does not allow reciprocity. So, as explained by a water sports retail store, "It's like forcing me, a guy who lives in New Jersey and has a New Jersey driver's license, to get a Georgia driver's license if I want to drive through Georgia." Many states fall between the continuum, allowing people to operate PWC who are between 12 and 16 years of age so long as supervised by an individual over 18 years of age. Many argue that legislation represents only a political attempt to pacify PWC opponents without addressing key problem areas. For example, early morning and late evening noise disrupts the peacefulness and tranquility of living near the water. Although many state laws prohibit PWC operations between sunset and sunrise (e.g., Illinois, Georgia, North

Carolina, New Jersey), other states allow operations between sunset and sunrise so long as the PWC is equipped with a light (e.g., Delaware, Oklahoma).

In addition to limited uniformity, the difficulty of enforcement often dilutes the impact of the laws. Michael Hector, sales manager of a California PWC rental store, articulates the problem (Bluewater Network: Protecting, 1997).

From the top of Monterey Bay all the way to the Golden Gate Bridge, there is a single sheriff's boat....Generally speaking, most people break the laws most of the time.

Park (1996) also echoes the limited resources devoted to marine enforcement. As stated by Park (1996, p. 2),

In 1988 the state of New Jersey had over 200 officers on the water, today [1996] that figure is down to 134. Over the same period the number of registered boats in New Jersey has grown from approximately 140,000 to about 199,000 today. . . . The trend toward fewer officers and more boats seems to be more the rule than the exception.

Limited resources result in a paucity of enforcement personnel trying to regulate mass populations of PWC swarming the waters. Even if "caught," penalties for breaking state legislation are minimum. For example, Virginia's state law fines imposes the following fines for violating particular aspects of the law.

- Operating PWC under age 14: \$103
- Operating PWC before/after hours: \$63
- Operating PWC without wearing a personal flotation device: \$63
- Operating a PWC without a lanyard: \$63
- Exceeding capacity on PWC: \$63

As evident, fines frequently fail to alter user behaviors.

Another limitation is the apparent conflict with some manufacturer's suggestions. For example, in *Bedard v. Bateman* (1995), the plaintiff was injured in a collision between his PWC and one operated by the 13 year old defendant. Recovery was denied to the plaintiff, in part, because Maine law permitted Joanna to legally operate the PWC at age 13 even though the PWC owner's manual recommended a minimum

operator age of 14 years.

In an attempt to address the lack of uniformity among individual states, reduce confusion on reciprocity issues, regulate liveries renting PWC, and defray the potential for an outright ban of PWC, the National Association of State Boating Law Administrators adopted a uniform PWC "Model Act" in 1991 (NASBLA Model Act, 1996). The Act, initially adopted in 1991, has been amended twice, once in 1996 and again in 1997. The PWIA introduced their Model Personal Watercraft Operations Act in 1988 (Park, 1998). The PWIA's Model Act has also been amended twice. Both Acts are very similar. The Acts' inclusions are summarized below. Citation exists where the inclusion is part of one act only.

- Definition of a PWC;
- Requires the use of a lanyard type engine cutoff switch if available;
- Requires the wearing of U.S. Coast Guard approved PFD;
- Prohibits PWC operation between sunset and sunrise;
- Prohibits operation by those under 16 years. A person between 12 - 15 may operate if accompanied by a person of at least 18 years (PWIA bill has no age restrictions except for liveries);
- Mandates "reasonable and prudent" operation of the PWC;
- Prohibits becoming airborne or completely leaving the water while crossing the wake of another vessel within 100 ft. of the vessel creating the wake;
- Prohibits weaving through congested traffic;
- Requires a no wake speed when within 100 feet of an anchored or moored vessel, shoreline, dock, pier, swim float, swim area, swimmer(s), surfers, or persons engaged in angling or any manually operated propelled vessel;
- Prohibits the operation of a PWC too close to another vessel;
- Exempts those involved in an officially sanctioned regatta, race, marine parade, tournament, or exhibition;
- Liveries must include the following

instructions prior to renting: (1) operational characteristics of PWC, (2) laws and regulations, boating rules of the road, and personal responsibility, and (3) local characteristics of the waterway to be used (PWIA Act prohibits liveries from renting to person under 18 years of age);

- Prohibits towing unless another person on board as an "observer";
- Prohibits towing unless there is adequate seating space for the operator, the observer, and the person being towed.
- Requires that all related laws be uniformly applied to all types of powered vessels (PWIA Model Act only).
- Model Act takes precedence over all local laws. But, nothing prevents localities from passing regulations related to reasonable vessel speed zones, reasonable idle speed zones or vessel exclusion zones (i.e., for swim areas) within their jurisdiction (PWIA Model Act only).
- Requires education and the successful completion of either a safe boater course approved by NASBLA or a proficiency exam testing related knowledge to operate a PWC. Certificates must be received to prove successful completion of the course or examination. Certificates are reciprocal in other states (PWIA Model Act only).
- Education

The Model Act represents a genuine attempt to mitigate many prescribed problems associated with the PWC. For example, operating at no wake speed when within 100 feet of shorelines can serve to preserve nurseries and other marine life. The prohibition of operating between sunset and sunrise reduces disturbances caused by the revving of PWC engines while mitigating accidents due to limited visibilities. Accidents are also potentially reduced via the minimum age requirement for operation of a PWC.

Unfortunately, limitations of the Model Act exist. For example, the Act doesn't preclude all wake jumping and noise and marine life disturbances still exist during the hours between sun-

rise and sunset. And, similar to state legislation, enforcement becomes a critical issue regarding the legitimacy and effectiveness of any legislation adopted to regulate PWC usage on the waters.

### **C. Ordinances Initiated and Enforced by Localities**

Ordinances initiated and enforced by various state, city, or county localities present another option to the regulation of PWC operations. Certain areas with extensive environmental and marine growth and/or heavy commercial or recreational traffic might justify outright bans on PWC operations. For example, "Massachusetts prohibits PWC on all lakes under 75 acres" and Vermont prohibits PWC on lakes under 300 acres (Donheffner, 1997, p. 10). Even the PWIA supports local ordinances as necessary. For example, official PWIA materials illustrate the perceived effectiveness of this alternative when describing practices implemented by Daytona Beach, Florida (PWIA, Five Point PWC Platform, 1997).

Daytona Beach had a congestion problem on the water, so it established five riding zones along different areas of the beach just for PWC access. Operators can ride in their own zones, and it's illegal for other boaters and swimmers to be in a PWC zone. Conversely, it's illegal for PWC to operate outside their zones.

However, total banning of PWC usage should be approached cautiously as this approach is not supported by existing case law.

The court of appeals in Michigan in *Great Lakes Motorcycle Dealers Ass'n. v. City of Detroit* (1972) is instructive as to the legality of PWC regulations completely banning use of PWC operations. In the Great Lakes Motorcycle case, the city of Detroit prohibited the operation of motorcycles on approximately 237 city blocks as a result of petitions signed by residents complaining of extreme noise. The plaintiffs argued that the prohibition violated constitutional rights guaranteed by the equal protection and due process amendments of the state and federal constitutions. In holding for the plaintiffs, the Michigan court stated that regulations are al-

lowed so long as they are not "arbitrary and unreasonable." (Great Lakes, 1972, p. 788-789). Specifically, the Michigan court stated,

The blanket exclusion of all two-wheeled motor vehicles from the designated streets sweeps too broadly in an effort to eliminate the above-mentioned deleterious activities....The proper solution to the problems of excessive speed and noise is the enforcement of the speed and noise laws and ordinances. ... While we appreciate the fact that the improper operation of these vehicles can result in a situation which can be most annoying to the average citizen, we cannot ignore the fundamental constitutional rights of that segment of the population which chooses to use motorcycles as their mode of transportation.

Plaintiff-PWC advocates could argue similarly when legislation or local ordinances totally prohibit PWC operation on the state's waters. Similarly, in *People Ex Rel. Younger v. El Dorado County* (1980), legislation was passed which prohibited all rafting and boating. The legislation represented an exercise of police power that attempted to mitigate the degree of "noise, litter, pollution and unsanitary conditions caused by the rafters, as well as trespassing and fire danger during overnight stops" (*People Ex Rel. Younger v. El Dorado County*, 1980, p. 816). The court held unconstitutional legislation prohibiting all rafting and boating. As stated by the Third District Court of Appeal (1980, p. 817),

The public has a right to use the river; it has no right to pollute the river. Reasonable regulation is in order; use prohibition is not. The problems of pollution and sanitation in our increasingly crowded state are difficult and complex, calling for imaginative and sophisticated solutions. But total prohibition of access is an impermissible solution. The ordinance is invalid because it denies the constitutional right of the public to use of and access to a navigable stream.

Other man-made lakes that are not surrounded by riparian owners may be perfectly suited to PWC operations. Or, similar to the Monterey Bay Sanctuary, particular areas of the

water may be zoned for specific PWC operations.

Professor Waite, a law professor at the University of Buffalo, supported the zoning of the waters for particular activities in a 1961 law review article. In reference to the myriad of boating activities taking place simultaneously (e.g., sailing, fishing, powerful speed boats towing water skiers, and the slower pontoon boats), Professor Waite states,

Vessels sometimes injure swimmers, or fishermen seated in anchored vessels. Apart from the safety hazards they pose, recreational boaters also infringe on each other's enjoyment and on the pleasure of non-boating water sportsmen simply from the facts that there are millions of them and they are not all playing the same games. Some are fishermen, either trolling or stationary; some are cruisers in inboard motorboats; some are sailboat enthusiasts or canoeists; some tow water skiers at high speeds; still others move more slowly in houseboats. Not all these uses are compatible. . . .The tangle of activities afloat suggests that safety and prosperity can be achieved only if watercourses are zoned to particular activities. (Waite, 1961, p. 428-4299).

#### **D. Increase Enforcement of Existing Regulations**

As indicated earlier, the majority of the states have laws regulating PWC use on the water. The problems with many laws, however, is lack of enforcement. As described by the PWIA (PWIA: PWC Loan Program, 1997),

While boating has grown significantly over the past 10 years, very few jurisdictions have increased their on-water law enforcement capability to match this growth. In fact, the opposite is more common; jurisdictions have cut resources for on-water enforcement, even as they theoretically garner more revenue from boat registrations and taxes.

The PWIA, an industry association of PWC manufacturers, has attempted to facilitate enforcement efforts through its loan program.

"Since 1989, manufacturing members of the PWIA have loaned almost 8,000 watercraft to 5,182 law enforcement, rescue and boating education agencies" (PWIA: PWC Loan Program, 1997). Testimonials account for the success of the PWIA loan program.

**Jacksonville Beach, Florida.** Jacksonville Beach had actually banned PWC for 60 to 90 days because of congestion and irresponsible riding. When the Jacksonville Beach Police Department obtained a loaner craft and put a law enforcement officer out on the water, congestion and irresponsible riding were significantly reduced. More PWC have been loaned to the department for law enforcement use.

**Pismo Beach, California.** Complaints about PWC dropped significantly when the Pismo Beach Fire Department and Port San Luis Harbor officials each obtained loaner craft, and stepped up law enforcement on the waters. No additional regulations restricting PWC use have been enacted in the six years since the loaner craft have been in use.

PWC opponents argue that the loaner program represents a ploy by the manufacturers to preserve a very lucrative industry at the expense of other concerned stakeholders. Regardless of ultimate motive, the loaner program appears to be effective at enforcing existing regulations.

### **E. Continue efforts to educate the PWC user**

The PWIA strongly endorses boater education. Mandatory boater education provides three benefits including reduced boating accidents, fatalities, and PWC-related complaints. Connecticut, New Jersey, and Maryland are illustrative of the effectiveness of education.

#### Connecticut:

√ Uneducated boaters have nearly five times the number of accidents as those who take training (Cohn, G., 1998b).

√ Complaints have decreased significantly since the mandatory education program

began.

√ Although PWC increased 300%, the number of accidents has remained constant.

#### New Jersey:

√ During the first year of mandatory education (1997), accidents dropped 37% and injuries decreased 31%.

√ Fatalities dropped 67% between 1996 and 1997.

#### Maryland:

√ Maryland enacted mandatory education in the mid-1990s. The number of PWC registered in the state from the years of 1995 to 1996 increased by about 25%. During the same time, there was a decrease in accidents by over 12%.

The PWIA suggests that mandatory education be phased in over time so as not to unduly impose upon prudent and experienced operators. The PWIA also suggest that an individual's certificate be recognized as valid in other states and that certifications need be obtained only once in a person's lifetime (i.e., no renewals). Unfortunately, mandatory education influences the rate of accidents, which as indicated by earlier statistics, is actually not increasing at an alarming rate. Mandatory education, however, leaves little or no influence on the environmental concerns posed by PWC opponents.

## **VI. Conclusion**

Zoning presents a common, non-radical approach to controlling PWC abuses while protecting the rights of the PWC operators. Wisconsin created an ordinance setting aside specific areas of water for a specified purpose as early as 1957 (*State v. Village of Lake Delton*, 1979). As explained by the Wisconsin Court of Appeals,

A regulation which apports the use of a given space of water to the single use and user which the space can reasonably accommodate at a single time reflects the obvious law of physics that two objects

cannot be in the same place at the same time.

A zoned portion of the waters where PWC operators are free to recreate seems best to protect the state's social and economic development for two primary reasons. First, banning PWC operations from all public waters would likely cause a decrease in economic activity as PWC users desiring to recreate would be forced to go to secluded areas not supported by restaurants, hotels, or shopping areas. Monies generated from tourist dollars and related taxes would impede progressive efforts of various locales. In *State v. Village of Lake Delton* (1979), for example, plaintiff-Department of Natural Resources sued to enjoin an ordinance that zoned a small portion of the lake for water ski exhibition licensees. In deciding for the defendant, the court recognized the economic activity the water ski exhibitions generated. For example, in 1976, the water ski exhibitions generated an approximate \$1 million during the summer season. As explained by the Court of Appeals of Wisconsin (1979, p. 628),

An ordinance prohibiting disruptive intrusions into the exhibition area during performances confers indirect economic benefits on businesses other than the licensee. Those benefits generate tax revenues at state and local levels, benefiting the public in general.

*Second*, stipulating PWC operations to only man-made waters designed specifically for PWC operation only would likely curtail the revenues generated by PWC manufacturers, distributors, and retailers. Families, for example, designing vacations around sites with "something for everyone" will find traditional lakes most attractive. Traditional lakes providing a variety of alternative boating activities in addition to the supplementary activities of, for example, arcades, shopping and socializing. Monies expended for PWC will be reduced to those "die-hard" PWC operators only. Decreased social security taxes, unemployment insurance costs, and a decrease in the former employees' level of discretionary monies creates economic hardships that multiply within any community. Third, a total ban appears to unduly punish responsible riders while

expanding the legal rights of police power. The Wisconsin Court of Appeals defended zoning in *State v. Village* (1979). As stated by the court (1979, p. 634), zoning "provides a mechanism through which the user may exercise his right, held in common with all citizens, to use public property for a legitimate purpose."

Key factors relating to the success of the above solution include the party responsible for the zoning, the effective enforcement of the zoning, and the perceived fairness of the zoning. A seemingly logical regulatory body to govern zoning for PWC use would be the US Coast Guard for each state. The state's coast guard would need to ensure that monies were available to regulate, enforce, and penalize accordingly, zone violators. The perceived fairness of the zoning ordinance will be influential to the public's receptiveness. A uniform approach to regulating the waterways would be to allocate 10% of the entire water for PWC usage. In comparison, others suggest that the water zoning be determined, in part, based upon PWC demand in combination with other boat operations. In other words, those waters with heavy PWC demand and traffic and minimal wildlife or fishing utility would have a larger zoned area while other waters with more commercial traffic, a lot of diverse boating activities, and fruitful marine wildlife have a smaller zoned area. The future of the PWC industry is yet to be determined. However, it is apparent that regulatory attempts and judicial interpretations will continue.

## References

- "Across the USA: News from every state (KY)." (1998, January 12). *USA Today*, p. 10A.
- Anderson, A. W. (1997). Contemporary issues in personal watercraft litigation, legislation, and regulation. Unpublished paper.
- Ausness, R. (1986). Water rights, the public trust doctrine, and the protection of instream uses. *University of Illinois Law Review*, 407, 407-437.
- Bartke, R. W. (1968). The navigation servitude and just compensation: Struggle for doctrine. *Oregon Law Review*, 48(1), 1-44.
- Beckett, G. (1996, November). 3 courts overturn bans and limits on jet bikes.
- Bedard v. Bateman*, 665 A.2d 215 (Me. 1995).
- Berman v. Parker*, 348 U.S. 26 (1954).
- Bluewater Network: America's #1 source of toxic

- hydrocarbon pollution (brochure). Available from : Bluewater Network, 300 Broadway, Suite 28, San Francisco, C.A. 94133, phone: 415-788-3666.
- Bluewater Network: Protecting oceans, lakes & rivers for all living creatures (brochure). Available from : Bluewater Network, 300 Broadway, Suite 28, San Francisco, C.A. 94133, phone: 415-788-3666.
- "Boating accidents up in 1995." (1996, May 6). (Online). Available: <http://dnr.state.il.us/ILDNR/OFFICES/PUBAFFR/news/Boat96.html>.
- "Bombardier announces quieter watercraft for 1999." Press Release from Bill Stone, Bombardier Marine Products Division, to Ken Grimes with Ketchum Public Relations.
- Branche, C. M., Conn, J. M. and Anest, J. L. (1997). Personal watercraft: Related injuries. *Journal of American Medical Association*, 278(3), 663-665.
- Breeden, et al v. Valencia, Inc., et al*, 557 So.2d 302 (La. App. 1990).
- Brennen, J. (1992, September 14). Environmental noise analysis. Prepared for Feldman Shaw & DeVore by Brown-Buntin Associates, Inc. (Fair Oaks, CA).
- Buckley, J. T. (1998; January 30). Wheaties hooks angler for its boxes. *The USA Today*, p. B1.
- Buckley v. City of Redding, Cal.*, 66 F.3d 199 (9th Cir. 1995).
- Burt v. Munger*, 23 N.W.2d 117 (1946).
- California Casualty Insurance Company v. Northland Insurance Company*, 56 Cal.Rptr.2d 434 (Cal. App. 1996).
- Chapman School of Seamanship: PWC Training & Certification (1997). (OnLine). Available: <http://chapman.org/chapman/pwc.html>.
- Choat v. Kawasaki Motors Corporation*, 675 So.2d 879 (Ala. 1996).
- Christ, Jr. v. Maryland Department of Natural Resources*, 644 A.2d 34 (1994).
- Cohen, B. S. (1970). The Constitution, the public trust doctrine, and the environment. *Utah Law Review*, 1970(3), 388-394.
- Cohn, G. (1998a). Memo to PWIA Board of Directors and Government Affairs List. Roberts Communications. Miami, FL.
- Cohn, G. (1998b). Press release: Personal watercraft industry introduces mandatory education model act. Roberts Communications. Miami, FL.
- Commander Bob's PWC Page. (OnLine). Available: [www.mailbag.com/users/stob076/cbpcwc.html](http://www.mailbag.com/users/stob076/cbpcwc.html).
- Davis, P. N. (1996). Recreational use of watercourses. *Missouri Environmental Law and Policy Review*, 4, 71-87.
- Davis, P. N. (1971). Theories of water pollution litigation. *Wisconsin Law Review*, 1971(3), 738-816.
- Donheffner, P. (1997, January 16-17). Emerging trends for management of personal watercraft use. Paper presented at the Sixteenth New Orleans Maritime Seminar (New Orleans, LA).
- Duval v. Thomas, Fla.*, 114 So.2d 791 (1959).
- Edwards, E. (1997, May). Churning the waters. *Traverse*, p. 18.
- Egan, T. (1996, March 16). *Jet Skis v. peace on islands in battle of San Juan County*. *The New York Times*.
- Environmental Fact Sheet: Emission standards for new spark-ignition marine engines. Published by the Environmental Protection Agency ([www.epa.gov/OMSWWW](http://www.epa.gov/OMSWWW)).
- Eposito, J. C. (1970). Air and water pollution: what to do while waiting for Washington. *Harvard Civil Rights: Civil Liberties Law Review*, 5, 32-52.
- Fecteau, L. (1997, October). Industry, USCG question alarming PWC injury data.
- "Game and fish Licenses, permits and fees." OnLine. <http://www.arkreg.state.ar.us/data>.
- Gerdes, W. (1996, February 4). Personal watercraft hottest things on water. *Detroit Journal*. (OnLine). Available: [www.rust.net/~workers/sports/8jetski4.html](http://www.rust.net/~workers/sports/8jetski4.html).
- Great Lakes Motorcycle Deal. Ass'n v. City of Detroit*, 196 N.W.2d 787 (1972).
- Guidelines for the use of certain powered craft, such as waterscooter, personal watercraft, waterbike, jetski, waverunner, seadoo, on controlled waters (1995). PIANC, Working Group No. 6 of the Special Commission for Sports and Pleasure Navigation.
- Harris v. Brooks*, 283 S.W.2d 129 (1955).
- Huff v. Goldcoast Jet Ski Rentals, Inc.* 515 So.2d 1349 (Fla. App. 1987).
- Inhabitants of Marion v. Tuell*, 90 A. 484 (1914).
- Jefferson Insurance Company of New York v. Sea World of Florida, Inc.*, 586 So.2d 95 (Fla. App. 1991).
- Jensen, C. R. (1995). *Outdoor Recreation in America*. Champaign, IL: Human Kinetics.
- Johnson, R. W. (1989). Water pollution and the public trust doctrine. *Environmental Law*, 19(3), 485-513.
- Kansas Department of Wildlife and Parks (1996). Literature provided by Cheri Swayne, Boating Education Coordinator and Boating Law Administrator. Topeka, KS.
- Kent, B. (1997, July 6). The law and lessons on watercraft safety. *The New York Times*, section 13Nj, p. 5.
- Laitos, J. G. (1987). Constitutional limits on police power regulations affecting the exercise of water rights. *Colorado Lawyer*, 16, 1626-1634.
- Lamprey v. Metcalf*, 53 N.W. 1139 (1893).
- Lawton v. Steele*, 152 U.S. 385 (1894).
- Lazarus, R. J. (1986). Changing conceptions of property and sovereignty in natural resources: Questioning the public trust doctrine. *Iowa Law Review*, 71, 631-643.
- Ling, M. (1997). EAC begins campaign to ban jet skis on coast. (OnLine). Available: [www.ptreyeslight.com/stories/july18/jetski.html](http://www.ptreyeslight.com/stories/july18/jetski.html).
- Lipworth v. Kawasaki Motors Corp. U.S.A.*, 592 So.2d 1151 (Fla. App. 1992).
- Long, R. (1997, January). Polluting for pleasure: Part II. *Sail*, pp. 70-77.
- Lydecker, R. (1997, July). The noise that annoys. *Boat/ U.S. Magazine*, p. 12-13.
- Lyke, M. L. (1996, June 22). Islands of calm: A Jet-Ski ban yields silence, at least for now. *The Washington Post*, p. A1, A13.
- Madison v. State*, 83 N.W.2d 674 (1957).
- "Marin County: Supervisors support ban on jet skis." (1997, October 1). *The San Francisco Chronicle*, p. C2.
- Martin v. Waddell*, 41 U.S. 367 (1842).

- McGahhey v. McCollum*, 179 S.W.2d 661 (1944).
- Mitchell Realty Co. et al. v. City of West Allis*, 199 N.W. 390 (1924).
- Moore, K. (1997, June 29). Jet-boaters all must be certified safe. *Asbury Park Press*, p. A1.
- Moore, K. (1996, April 6). Docksides tests show relative quiet of water jets. *Asbury Park Press*.
- Munro, J. (1961). *Public v. private: The status of lakes*. *Buffalo Law Review*, 10(3), 459-471.
- NASBLA Model Act for Personal Watercraft. Available from the Office of Boating Safety Program Management Division (G-OPB-1), A.J. Marmo (Chief, Program Management Division) at phone # 202-267-0950.
- NASBLA Reference to State Boating Laws. Available from the Office of Boating Safety Program Management Division (G-OPB-1), A.J. Marmo (Chief, Program Management Division) at phone # 202-267-0950.
- Neptune City v. Avon-By-The-Sea*, 294 A.2d 47 (1972).
- O'Connell, K. A. (1996). Transit experts come to Yosemite: Glacier's natural quiet and park waters at odds with sport. *National Parks*. (OnLine). Available: [www.npca.org/np/96-07/ja9610ne.html](http://www.npca.org/np/96-07/ja9610ne.html).
- Organic Act, 16 U.S.C. § 1.
- Palmer, J. (1996). Personal watercraft accidents soar. (OnLine): Available: [www1.trib.com/scjournal/ARC/1996/JULY/7-4-96/ln1.html](http://www1.trib.com/scjournal/ARC/1996/JULY/7-4-96/ln1.html).
- Park, H. (1996, May 10). PIANC workshop on vessel traffic conflicts. Washington, D.C.
- Park, H. (1998). Phone interviews and e-mail conversations. OnLine: [hpark4@aol.com](mailto:hpark4@aol.com).
- People Ex Rel. Younger v. El Dorado County*, App., 157 Cal.Rptr 815.
- PWIA (1997): PWC and the Environment; PWC and Noise; Five Point PWC Platform. Available from Jan Plessner, Public Affairs Coordinator, Kawasaki Motors Corporation, P.O. Box 25252, Santa Ana, CA 92799-5252.
- PWIA (1998, February 4). Letter to Mr. Walter Dabney, Superintendent of the Southeast Utah Group National Park Service, from the PWIA.
- Philp, T. (1997, August 27). Danger rides along with the thrills. *McClatchy Newspapers, Inc.: Sacramento Bee*, p. B1.
- Plager, S. J. (1968). Interference with the public right of navigation and the riparian owner's claim of privilege. *Missouri Law Review*, 33, 608-635.
- Putnam v. Kinney*, 227 N.W. 741 (1929).
- "PWCs out of place in parks." (1997). (OnLine). Available: <http://www.npca.org>.
- PWIA v. Department of Commerce* (1995). (OnLine). Available: <http://www.ll.georgetown.edu/Fed-Ct/Circuit/dc/opinions/93-5336a.html>.
- "Reckless use of Jet Skis banned in bill." (1997, August 30). *The San Francisco Chronicle*, p. A20.
- Reis, R. I. (1967). Policy and planning for recreational use of inland waters. *Temple Law Quarterly*, 40(2), 155-193.
- Sanders v. De Rose*, 191 N.E. 331 (1934).
- Sax, J. L. (1989). The limits of private rights in public waters. *Environmental Law*, 19, 473-483.
- State v. Public Service Comm.*, 81 N.W.2d 71 (1957).
- State v. Village of Lake Delton*, Wis.App., 286 N.W.2d 622 (1979)
- State Farm Fire & Casualty Company v. Guy Johnson*, 596 So.2d 1162 (Fla. App. 1992).
- Steier v. Batavia Park District*. No 93-MR-414. Appellate Court of Illinois (2nd Dist.). <http://www.illinoisbar.org/Slips/HTML/2951397.html>.
- Strauss, C. H. and Lord, B. E. (1990). Expenditure characteristics of Pennsylvania state park audiences. *Journal of Park and Recreation Administration*, 8(4), 53-69.
- Swartz v. Sheston*, 300 N.W. 148 (1941).
- Stoebuck, W. B. (1980). Police power, takings, and due process. *Washington and Lee Law Review*, 37, 1057-1099.
- Tannenbaum, M. M. (1985). The public trust doctrine in Maine's submerged lands: Public rights, state obligation and the role of the courts. *Maine Law Review*, 37, 105-151.
- Taylor v. Tampa Coal Co.*, 46 So.2d 392 (1950).
- Thomas and Thomas v. Prudential Property and Casual*, 673 So.2d 141 (Fla. App. 1996).
- Thompson v. Enz*, 140 N.W.2d 563 (1966).
- U.S. v. Causby*, 328 U.S. 256 (1946).
- "Virginia recognizes national safe boating week." (1997, May 14). U.S. Newswire, Inc. (OnLine). Available: [http://web.lexis-nexis.com/universe/docu...a3&\\_md5=acfdcb9bdee94a84544351e74c10404e](http://web.lexis-nexis.com/universe/docu...a3&_md5=acfdcb9bdee94a84544351e74c10404e).
- Waite, G. G. (1961). Pleasure boating in a federal union. *Buffalo Law Review*, 10, 427-447.
- Weden II v. San Juan County* (1996). Oral decision, Superior Court of the State of Washington for Whatcom County, No. 96-2-00376-6.
- Whiteman, L. (1997, July/August). Making waves. *National Parks*, pp. 22-25.
- Wilderness Public Rights Fund v. Kleppe*, 608 F.2d 1250 (1979).

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