Iowa Civic Analysis Network

The University of Iowa

Personal Watercraft: Issues and Regulations

Brief History

In the early 1970s, Kawasaki Motors Corporation introduced a personal watercraft (PWC) in the United States known as the Jet Ski. According to the U.S. Coast Guard, a PWC is any inboard boat under 16 feet in length in which riders sit, stand, or kneel on the vessel rather than sit or stand inside it. PWC are powered by a 2-stroke or 4-stroke gasoline engine, the same engine type used in cars. The PWC generates its power by drawing water in through the bottom of the boat by an internal propeller (impeller) and accelerates it through a nozzle at the back of the boat.[1] PWC designs range from single passenger watercraft to the more popular multi-passenger watercraft. They are powerful enough to tow an individual behind the vessel.

PWC sales peaked in 1995 with approximately 200,000 units sold. Since that time, annual PWC sales have declined significantly. In 2004, there were approximately 1.48 million PWC owned in the United States. It is estimated that 20 million Americans ride PWC each year.[2]

[1] http://www.boaterexam.com/usa/alaska/education/c8-other-water-activities.aspx
[2] http://www.pwia.org/faqs/background.html

Issues Surrounding PWC Use

Safety

Because some PWC models can travel at speeds of up to 65 M.P.H., the most important safety concern is the driver's ability to operate the vessel. There is particular concern surrounding the use and operation of PWC by people aged 15 and under because of their lack of driving experience. Coast Guard statistics for 2003 show that 40 percent of injuries reported on personal watercraft involved people ages 19 and under. In 2003, 112 people ages 12 and under were reported injured in personal watercraft accidents.[3]

Though each state is responsible for creating its own laws regarding PWC safety regulations, the National Association of State Boating Law Administrators (NASBLA) has several acts that are meant to serve as models for state laws. NASBLA is composed of authorities from each state and its goal is to achieve uniformity for boating laws from state-to-state. NASBLA acts recommend that people be at least 16 years old to operate a PWC on any state waters.[4] Currently, there are only 14 states that require operators to be at least 16 years of age, while the other 36 states all have requirements of less than 16 years of age. There are two states, Idaho and Alaska, that do not have any age requirement.[5] The NASBLA regulations also require that each person aboard a PWC wear a personal flotation device approved by the U.S. Coast Guard and that the operator attach the emergency engine cut-off link to his or her person while the vessel is in motion. Guidelines for vessel operation include not operating the PWC in an unsafe or reckless manner, such as weaving through congested traffic or operating at greater than slow/no wake speed within 100 feet of an anchored vessel, shoreline, marked swim area, or dock. States are responsible for determining the boater safety classes or certification necessary to operate a PWC.

Iowa PWC laws allow children less than 12 years of age to operate a PWC if accompanied on board by a responsible person at least 18 years and experienced in operating the vessel. People between the ages of 12 and 17 may operate a PWC only if they have successfully completed a boater education course approved by the Iowa Department of Natural Resources or if a responsible person at least 18 years of age and experienced in operating the vessel accompanies them on board.[6] For those older than 18, a boater education course is not required to rent or operate a PWC.

Environmental

Though PWC manufacturers have worked to address some of the environmental issues regarding PWC, several issues still exist. These can often be mitigated with proper use by PWC operators. For example, refueling the vessel on land rather than in the water reduces the chances of gasoline spillage into the water. In shallow waters, PWC stir up sediment and prevent light penetration, thereby depleting the water and its inhabitants of oxygen. Riding PWC in low water levels also destroys vegetation and sea grass beds. Finally, operating the vessel near the shoreline disrupts wildlife. The boating zone regulations that many states have in place for safety and noise issues

[3] http://www.uscgboating.org/alerts/alertsview.aspx?id=25
[4] http://www.nasbla.org
[5] http://www.pwcconflictresolution.net/
[6] http://www.boat-ed.com/ia/course/p4-3_whomayoperate.htm

help improve these problems because they prevent vessels from operating at full speed in low water levels and from operating near the shoreline. Another environmental concern with PWC is that operators must also be aware of the presence of sea otters, dolphins, and manatees in the water because they can come into direct contact with the vessels and be injured by or do damage to the PWC itself or the riders.

Noise Pollution

A large portion of PWC use is on lakes. About 92% of usage is on lake-type waters (60% on secluded waters and 40% split equally between intermediate-use and popular water bodies), while the remaining 8% is on oceans.[7] PWC produce a lot of noise because they continually leave the water. When PWC are airborne, the water cannot muffle the engine noise and when the vessels re-enter the water, a loud smacking noise is produced. Communities have responded to the issue of PWC noise pollution in various ways. Banning the operation of PWC between sunrise and sunset is a restriction almost completely standardized in lakes and oceans across the country. Regulations such as distance limits of PWC use near shorelines and higher taxes on PWC sale and use are also popular methods.[8] Who makes the regulations depends on whether the property is private or public. On public waters, state regulations must be enforced and can be adapted to special concerns of the local community in some cases. Private waters may create their own PWC use regulations but must abide by state and national environmental standards.

In Maryland, a person "may not use a vessel on Maryland waters that emits noise in excess of 90db. All vessels manufactured after Jan. 1, 1990 must have a muffler device to suppress engine noise."[9] Deep Creek Lake in Maryland prohibits PWC use between 11:00 am and 4:00 pm on Saturdays, Sundays, and holidays from Memorial Day weekend through Labor Day.[10] Other than waters in national, state, and local public parks, a community is capable of creating and enforcing its own noise regulations.

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[7] http://www.nonoise.org/library/drowning/execsum.htm
[8] *Ibid*
[9] http://www.pwcsafetyschool.com/maryland/hb_md_state.html
[10] *Ibid*