Guidelines for Developing Non-motorized Boat Launches in Florida

These guidelines were prepared by the Florida Fish and Wildlife Conservation Commission with input from a Non-motorized Boating (NMB) Technical Assistance Group.

The guidelines are intended to provide planners and designers with information to create inexpensive and sustainable access for those who enjoy our waters in non-motorized boats.

These guidelines follow the ABC principle

The ABC's of Logical Launch Design:

- Accessible
- Best-suited
- Cost-effective
- Durable
- Environmentally-friendly

National Park Service manual *Logical Lasting Launches*

Accessible

Access should allow launching and landing smoothly without worry for tipping or damaging boats. This can be accomplished by using existing firm surfaces when appropriate or by installing floating docks with launches.

- **Height** Floating launch deck should be no more than 5-6 inches above highest expected water level. The lower the better.
- **Width** of the deck at least 5’ wide. Preferably 6’ to 12’.
- **Slope** Not to exceed 8.33% whenever possible (Universal Access Guidelines)
- **Support** Handrails or other support structures for universal access

Accessibility includes those of all abilities

Helpful universal access guidelines:
http://www.nps.gov/ncrc/programs/rtca/helpfultools/launchguide/3.pdf

When docks are necessary

To protect resources ensure they are universally accessible

If floating docks must be utilized make them as low to the water as possible and include universally accessible options where appropriate.

Best-suited Launch

- Is constructed in accordance with applicable regulations and conditions
- Provides safe access and limits user conflict
- Can withstand fluctuating flow levels, currents, tides and exposure to the elements
- Provides a firm surface for launching and landing.
- Will not easily be damaged due to climatic or seasonal conditions
- Is designed with consideration for multiple types of users if appropriate
- Considers carry capacity of launch, parking and waterway

Cost-effective and Durable

Existing natural sites (banks, beaches…) as opposed to constructed ramps are often preferable to users and may offer lower cost access options if they can be located and designed to minimize erosion and damage to underwater vegetation.

- Use constructed ramps only when necessary
- Choose access site with minimal exposure to winds, current and motorized boat traffic
- Modify existing boat docks or existing launch structures to make them more “Non-motorized friendly”

Environmentally-friendly

- Identify sensitive habitats at access points, campsites, day use areas
- Locate access points and design sites at appropriate distances from bird colonies, manatee zones, other sensitive areas
- Keep lighting low for wildlife and sea turtles
- Design with the smallest footprint possible
- Protect submerged vegetation with boardwalks and or docks if necessary
- Use native plants in areas adjacent to launch and parking
- Parking areas and surfacing should be designed and located to minimize polluted runoff and erosion

Choose existing natural sites if available and appropriate

Robinson Preserve in Manatee County

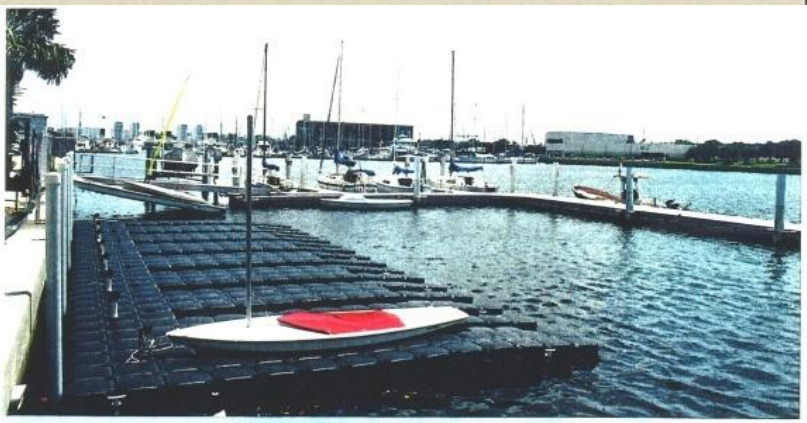
Kayak Amelia

Airboats use these wooden slats to ‘dry launch’ from a trailer but they are also utilized by paddlers to decrease hull damage from the concrete surface. Modify existing launch structures by adding wooden or PVC slats to make a launch NMB-friendly.

The Great Calusa Blueway is using remnants of synthetic turf left over from installation in a stadium to surface these launches. They have installed it in an area with mucky soil by using pressure treated wood at both ends and 30” galvanized spikes spaced ~3’ apart to hold it in place. This is inexpensive, not slippery, and is very popular with users. It will require cleaning with a pressure washer annually if in a sunny location and 3-4 times a year if sited in shady conditions.

Synthetic industrial matting is used to stabilize surface on this launch along the Suwannee River. It can also be used to stabilize banks with a 2-4% slope and allows vegetation to grow through matting. It is anchored with 18-24" stainless steel pins and requires little maintenance. This launch is submerged frequently and has survived several flood events with no problems.

Additional launch options



Erosion can be prevented with good siting and proper access design

Identify users and ask the right questions

Good planning starts with questions

Who are you planning for?

Involve paddlers, kayak anglers, rowers, and small sail boat owners of all abilities in early planning stages. They may have simple, cost-effective ideas to create a successful access design.

Potential Partners?

Local user groups may be interested in helping to maintain access and raise funds

Local clubs are a good source of input

Features for paddlers and kayak anglers

•Short distances from parking area to launch or provide option for users to unload boats & gear near launch area and park remotely. Overnight parking is a plus for anglers and long-distance paddlers.

•Concrete ramp surface is damaging to the hull of boats being launched by hand. When no existing firm surface is available consider rubber matting, synthetic products, or other surfacing options.

• Design vehicle loading in line with the launch. Avoid narrow circular driveways which become congested.

• In multi-user sites provide some parking for vehicles with and without trailers. Outfitters may have large vans or buses and long trailers.

• Secure storage

Launch & parking features for rowers

• Floating docks must be stable for rowers with a minimum dock length of 45 ft and height of 5-6” above the water. No dock posts should be present.

• Rowers need large parking and turning areas to facilitate length of crew boats trailers which are 76 ft. long

Preferred launch & parking features for small sailboats

- Overhead power lines pose hazards for sailors in both launch and parking areas.

- Sailors need adequate room for parking trailers.

- Hardened sand or small gravel is suitable surface for most small sailboats to launch.

Amenities that are appreciated by all

- Restrooms
- Fresh water to rinse boats/gear
- Trash cans
- Picnic area
- Maps or navigation guides

Examples of good design features

River Breeze Park, Volusia Co.

Parking – Free parking for all vehicles. *24 hours access with overnight parking.*

Launch – Beach area launch with gentle slope into water. *Out of the way of the motorized boat launch area.*

Portage to Launch – *You are able to unload your boat and gear near the launch. The parking lot is located about 350 feet away*

Amenities – *Restrooms, showers, picnic tables, grills, fresh water, shade trees.*

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Oleta River State Park, Dade County

Parking – Plenty of vehicle parking but no trailer parking. Park is open from dawn to dusk. State park fee.

Launch – Beach launch area with steep drop off after three feet in the water.

Portage to Launch – You are able to unload your NMB vessel and gear near the launch walkway. *The parking lot is about 50 feet away from the launch area*

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Amenities – *Restrooms (1/4 mile away), picnic tables, grills, playground, shade trees.*

Launch is accessed crossing under road

Phil Foster Park, Riviera Beach

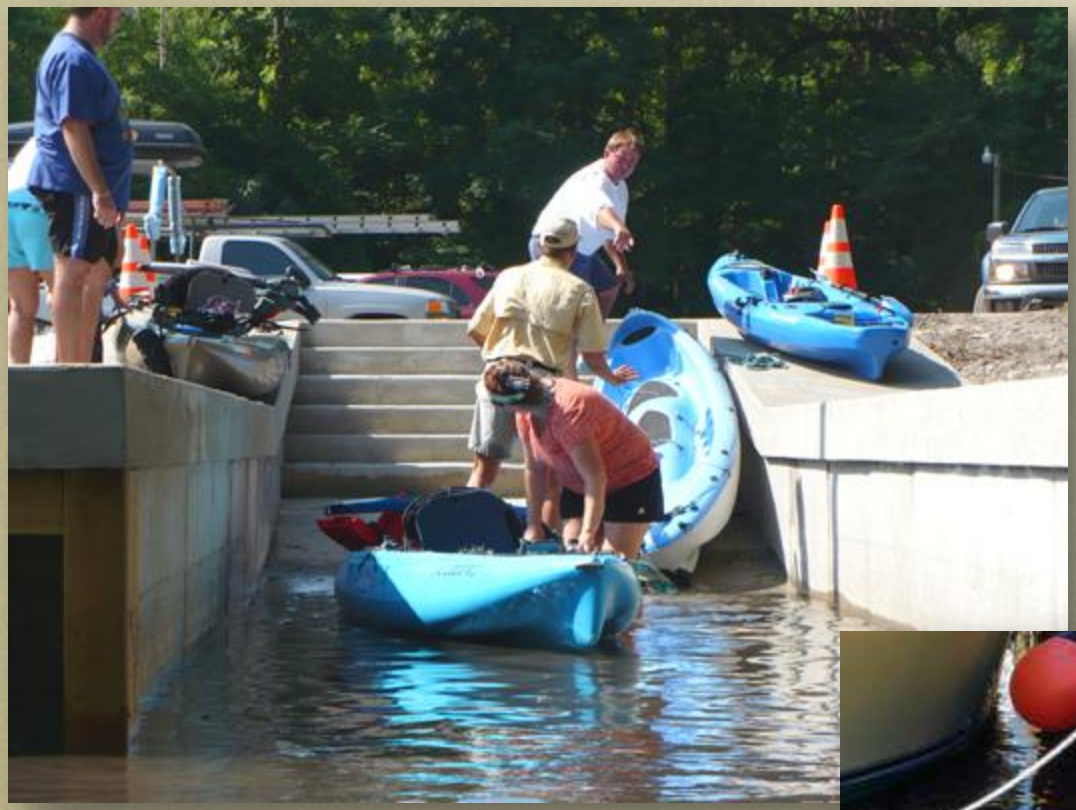
Parking – Free parking for vehicles and vehicle with trailer needs special parking permit. 24 hours access

The Launch – Beach area launch with gentle slope into water. *Out of the way of the motorized boat launch area.*

Portage to Launch – *The parking lot is located about 130 feet away from the launch area* (Portage under the bridge).

Amenities – *Restrooms*

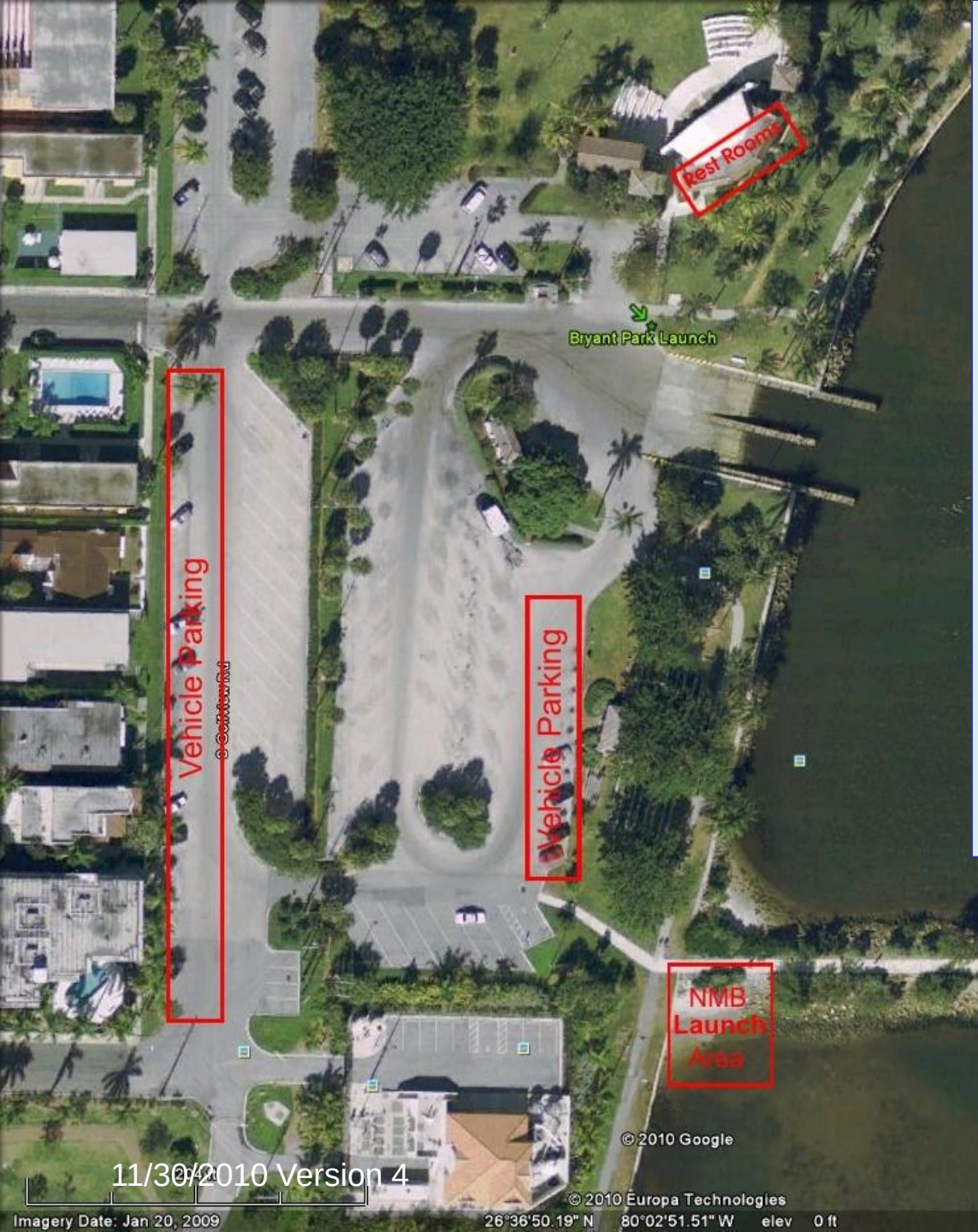
Some designs that could use improvement



Parking – *no parking for vehicle with trailers.*

Launch – Nice sloped launch but there is a pier immediately adjacent to the launch which means that kayakers have to avoid barnacles on the pier pilings

Portage to Launch – You have over a *400 foot portage from the parking lot to the launch* area. Wheels are needed for this one.



Parking – Free parking for all vehicles. Access dawn to dusk*, no overnight parking.*

Launch – *Algae/ mud covered concrete ramps that are very slippery during low tide. Improvised NMB launch area that has a small beach but users need to climb over boulders.*

Portage - distance to launch is OK – You are able to unload your NMB vessel and gear near the launch, about 130 feet away from improvised NMB launch area.

Amenities: restrooms

Remember these steps:

1. Look for partners and input from the target user groups
2. Keep the design as simple as possible while protecting resources with floating docks and boardwalks where necessary.
3. Utilize designers experienced with NMB users.
4. Contact regulatory agencies before developing plans; regulations will shape design features
5. Incorporate permits into timelines (3-18 months).

Cost estimates for projects may include:

- Topographic survey
- Geotechnical testing
- Construction drawings
- Permits
- Construction
- Long-term maintenance

Keep it simple
Avoid concrete, surface with something if unavoidable
Keep floating docks low if they must be used
Involve the users
Ask user groups to help maintain access sites and keep scrubbed to remove

Useful links:

National Park Service's *Logical Lasting Launches* design guidance for canoe and kayak launches:
http://www.nps.gov/ncrc/programs/rtca/helpfultools/launchguide.pdf

FWC's 'Creating Successful Paddling Trails':
http://myfwc.com/recreation/paddling_index.htm

Excellent design guidelines from Iowa's DNR River Program:
http://www.iowadnr.gov/riverprograms/files/chap3.pdf

For accessibility guidelines visit these websites:
http://www.nps.gov/ncrc/programs/rtca/helpfultools/launchguide/3.pdf
http://ncaonline.org/index.php?q=node/8
http://www.access-board.gov/outdoor/preamble.htm

Contacts for Non-motorized Boating Interests:

Rowing: http://usrowing.org
http://row2k.com

Sailing: http://training.ussailing.org/Learning/Getting_started.htm

Paddling:
Outfitters & Liveries: http://www.paddleflausa.com/memberdirectory.asp

Paddling Association/Clubs:
http://www.floridapaddlingtrails.com
http://www.clubkayak.com/

Kayak Anglers:
www.paddle-fishing.com - Florida west coast
www.jaxkayakfishing.com - Florida northeast coast
www.fcka.net - Florida panhandle

Suppliers of Floating Docks

AccuDock
1336 SW 8th Street
Pompano Beach, Florida 33069
954-785-7557 – www.accudock.com

EZ Dock, Inc
13620 East Reese BLVD, Suite 300
Huntersville, NC 28078
+1-888-752-9349 www.ez-dock.com

Jet Dock Systems, Inc
1-800-538-3625
http://www.jetdock.com/

Kayak Dock
877- 362- 5523
www.kayakdock.com

Kay-aKcess
PO Box 3092
Placida, FL 33946
941-662-5935
http://www.kay-akcess.com/

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Sources of Soil Stabilization and Surfacing Products

Soil Stabilization Products Company, Inc.
1(800)523-9992 or 1(209)383-3296
http://sspco.com

Geosystems
http://www.prestogeo.com/

Contech
8250 62nd Street N.
Pinellas Park , FL 33781
P: 800-881-1100
http://contech.com-cpi.com

Eco-Terr, Inc
http://www.stabiligrid.com/

Vynagrip, Inc. Industrial matting
http://www.vynagrip.com/index.htm

ThomasNet, Inc.
http://thomasnet.com

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Help us make these guidelines better. If you have examples, drawings, and digital photographs of access that would be useful to planners please contact: NMBaccess@myfwc.com