Permitting and the Environment

Karina Da Luz, Planning Section Supervisor
Planning and Development Management Division

kdaluz@broward.org
954-357-6623

Jeffery Halsey, Director
Environmental and Consumer Protection Division

jhalsey@broward.org
954-519-1468
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<td>Solid Waste License</td>
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<tr>
<td>Surface Water License</td>
</tr>
<tr>
<td>Tree Removal License</td>
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<td>Waste Transporter License</td>
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<td>Wetland Delineation</td>
</tr>
</tbody>
</table>

Proceed to ePermits

| | 35,000 |

Only select for Non Permitting/License Program one time document upload

Proceed to Upload

Air Quality Parking Facility
Highway Construction and Engineering Plan
Emergency Plan Document Upload
Development and Environmental Review

- ePermits
- DER
- Misc

Email, walk-in, web site, permit runner, etc.
Broward County Environmental Engineering and Permitting Division

Broward County Environmental Licensing

Linda Sunderland
Natural Resources Manager
954-519-1454
lsunderland@broward.org
Aquatic and Wetland Resources Program

Reviews and issues:
• Environmental Resource General Licenses
• Environmental Resource Licenses
• Wetland Determinations
• Marine Facility Operating Licenses
• Delegated State Environmental Resource Permits

Rule of Thumb: If the project goes in, on, or under water or wetlands of Broward County, it requires a license.

To apply:
• Submit all applications and documents electronically via https://webapps.broward.org/EPermits/
• Application fees may be paid electronically for GL and ERL.
APPLICATION FOR AN ENVIRONMENTAL RESOURCE
GENERAL LICENSE

Marine Address:
Environmental Protection and Growth Management Department
1 North University Drive, Suite 501
Fort Lauderdale, Florida 33304

Application No: S-1001
Make Check payable to:
Broward County Board of
County Commissioners

Questions 1 - 9 must be completed. Please submit electronically at: https://webapps.broward.org/Permits
Electronic payments are also accepted through this secure website.

The submission of the following information with the application will allow timely processing and is necessary
for staff to effectively evaluate each proposed project:

- One set of site developed plans (separate spf from the application and following documentation)
- A copy of a property survey clearly depicting the existing conditions. Please be sure all water structures are
  clearly labeled with the dimensions as measured from the wet face of the seawall;
- Photographs of existing conditions, if possible;
- A location / street map with the project site identified;
- Proof of ownership or sufficient interest in the project property;
- Plan view and cross-sectional drawings showing the proposed project must include:
  - accurate dimension of length and width for all structures over water measured from the wet face of
    the seawall (seawall cap, docks, seawalls, bulkheads, retaining walls, etc.);
  - the Mean High Water Level (MHWL), Mean Lower Water and substitute elevation (reference to NAVD 88) or
    Mean Sea Level;
  - the height of the proposed dock above MHWL;
  - canoe and width of water body;
  - presence of any wetland or fish habitat (passageway, system, etc.) communities;
- If maintenance dredging is proposed, please provide:
  - documentation of original dredged depth;
  - plan view of dredging location, with approximate dimensions;
  - cross sectional drawings depicting historical, existing and proposed conditions with elevations labeled;
  - calculations for amount of material to be removed (in cubic yards); and;
- If the proposed project will be constructed on property owned by a Drainage District, homeowners or condominium
  association, a letter from the District or Association approving the project is required.

1. Agent processing application:
   Street: __________________________
   City: ____________________________
   State: _____ Zip: __________
   Telephone: ______________________
   Fax: ___________________________  
   Email: __________________________  
   (Licenses will be emailed so please PRINT clearly)

2. Contractor or developer:
   Street: __________________________
   City: ____________________________
   State: _____ Zip: __________
   Telephone: ______________________
   Fax: ___________________________  
   Email: __________________________

3. Property Owner Name:
   Street: __________________________
   City: ____________________________
   State: _____ Zip: __________
   Telephone: ______________________
   Fax: ___________________________  
   Email: __________________________
APPLICATION FOR AN ENVIRONMENTAL RESOURCE GENERAL LICENSE

4. Location of proposed work: ____________________________
   Street: ____________________________
   City: ____________________________
   Zip: ____________________________

5. Are there any existing structures at the proposed work site that have been licensed by this agency? If so, provide license number _____________________________. Are there any other pending applications with this agency? If so, for what type of license _____________________________.

PLEASE BE ADVISED THAT THE PERSON(S) SIGNING BELOW IS/ARE CERTIFYING THAT THE PROPOSED PROJECT WILL BE IN COMPLIANCE WITH THE FOLLOWING CRITERIA FOR OBTAINING AN ENVIRONMENTAL RESOURCE GENERAL LICENSE.

A General License does not authorize any mangrove alteration activities, impacts to any submerged aquatic vegetation (seagrasses) or other natural resources.

6. Provide a complete detailed description of all proposed activities:

7. Description of proposed work (check all applicable items) Section 27-336(a) (1)

   □ (a) The repair or replacement of existing functional docks, provided that no additional waterway fill is used and the new or replaced dock is not enlarged beyond a total of 500 square feet over-water surface area for the new and existing structure.

   □ (b) The repair, maintenance, or construction of existing functional seawalls no more than one foot seaward of their original authorized location.

   □ (c) The relocation within an already approved right-of-way, repair or maintenance of existing utility transmission or distribution lines and associated adjacent facilities required to effect the repair.

   □ (d) New lake or pond construction of less than 2 acres, but equal to or greater than 1 acre, that are not connected with and do not exchange water with any other surface water body of wetland, except by means of a permitted overflow structure.

   □ (e) The installation of new private, non-commercial docks of 500 square feet or less over water surface area, where no dredging or filling is required except to install the piling.

   □ (f) Projects which are within isolated wetlands or lakes and/or otherwise, in the opinion of THE COUNTY, will not significantly degrade the environment (beallows, mussel piling, headwalls, culverts, etc.)

   □ (g) Proposed or existing rock quarry excavations. (Please see Section 27-336(a) (7) for additional information)

   □ (h) The construction, repair, maintenance or operation of any permitted storm water collection structure where no exempt pursuant to 52-349.230 F.A.C. as amended.

   □ (i) The use of sediment trapping by 50 cubic yards or less of sediment from isolated lakes or ponds and residential canals, with no upgrassing within the project area, where the sediments is removed from the waterway and deposited on a self- contained disposal site.

   □ (j) The installation of natural liners at the upward face of an existing vertical bankhead provided that the rip-rap is clean and free of debris, that no upgrassing is covered by the rip-rap, that no dredging or other filling is conducted and that the rip-rap is placed at a slope no steeper than 2H:1V and that no interference to other riparian property rights or navigation occurs.
APPLICATION FOR AN ENVIRONMENTAL RESOURCE GENERAL LICENSE

☐ (i) The removal or replacement of existing functional headwalls, pipes, culverts provided that they are otherwise in compliance with the code and are in artificially created waterways which discharge water for stormwater runoff. The pipes must be replaced in the original size and configuration and all elevations must be the same as the pre-replacement condition. All water quality provisions listed must be satisfied and the rerouting of water bodies is not authorized by this General License except by pumps, pipes or outfalls. Wetland areas may NOT be impacted by the activity.

☐ (ii) The installation of utility or transmission lines and/or embankments in the subsurface provided that no dredging or filling is required and that no snagging or significant habitat communities will be affected by the activity.

☐ (iii) Existing or new Roadway Constructions (please see Section 27-321(6)(a)(1) for additional information)

☐ The emergency repair, replacement or maintenance of existing utility transmission or distribution lines, provided that the owner of the damaged utility or the owner-sponsor provides verbal notice to the county of the condition, its location, and expected length of time required for the repair, replacement or maintenance activities. Section 27-321(6)(a)(1)

9. Mangrove alteration and certain types of trimming activities require an Environmental Resource License pursuant to Sec. 27-322 of the Broward County Code and Section 403.9021 Florida Statute. The General License does not authorize any mangrove alteration activities.

Are there mangroves on-site? Yes ☐ No ☐

Will this work require mangrove alteration or trimming? Yes ☐ No ☐

If “Yes”, an Environmental Resource License is required.

9. Are there any natural aquatic or submerged resources in the construction area? Yes ☐ No ☐

Natural aquatic resources include seagrasses, oysters, etc. Describe how this determination was made.

For Section 27-321(6)(a): "The permittee, by acceptance of this license, specifically agrees to allow access and shall allow access to the licensed owner, activity, or facility at any time. THE COUNTY reserves the right to inspect and verify compliance with this license and this chapter. Enforcement actions may be initiated for any violations."
Environmental Resource General Licenses (GL)

Typical projects:
- Docks ≤ 500 square feet;
- New seawall ≤ 12” in front of existing wall to remain;
- Dredge ≤ 20 cubic yards;
- Caps, decking, boatlifts, pilings, footers, FVPs;
- Lake excavation 1-2 acres;
- Wetland impacts < 0.25 ac.
- No resource impacts.

Processing time:
- If application is complete, less than 10 days.
- If incomplete, a Request for Additional Information (RAI) may be sent within 10 days.
- Up to 3 RAIs are possible.
- Most issues resolved with a quick email or phone call.
Environmental Resource General Licenses (GL)

Typical Application Issues:
• Work description;
• No photographs;
• Non-functioning seawall;
• Dock/seawall cap measurements;
• Backfill volume & source
• App info ≠ plans;
• Elevations not shown
• Not enough info in app/plans;
• HOA approval;
• Current survey; and/or
• Fee not submitted.
Proposed and Existing Conditions:
Proposed and Existing Conditions:

What is width of EXISTING and PROPOSED dock from wet face of existing seawall?

Elevations should be shown on both for:

- Seawall cap(s)
- MHW
- MLW
- Berm Elevation
What’s a wet face?

Width from wet face is different than width to seawall cap

Measure width from wet face at Mean High Water
Environmental Resource License (ERL)

General Overview:

- Exceeds GL criteria (dock over 500 sf, seawall > 12”);
- Dredging > 20 cubic yards;
- Docks/Seawalls with seagrasses/corals;
- Horizontal Directional Drilling under resources or waterways;
- Lakes > 2 acres in size;
- Wetland impacts > 0.25 ac.

Processing time:

If application is complete, a determination is made within 30 days and issued within 60 days.

If incomplete, a Request for Additional Information (RAI) is sent within 30 days. Applicant has 60 days to respond.

Up to 3 RAIs are possible.

Application may be denied if no response is received.
# Broward County Environmental Engineering and Permitting Division

## Environmental Protection and Growth Management Department

### Environmental Resource License Application Form

<table>
<thead>
<tr>
<th>Submit Hardcopy Applications To:</th>
<th>Submit Electronic Applications Via:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env. Licensing &amp; Building Permitting Division Aquatic &amp; Wetland Resources Program 1 North University Dr, Suite 201 Plantation, Florida 33324</td>
<td>E-permits: Electronic Permitting Uploader</td>
</tr>
</tbody>
</table>

### SECTION I: Application Checklist

The following information is required for works in surface waters or wetlands of Broward County or the creation of same. Initial application packages that do not include all applicable information requested below may not be accepted. Upon review of the application, additional information may be required. If you have questions regarding the application form or required information, please call (954) 985-1483 for assistance.

Basic Information to be included with all applications:

- Complete and notarized application form with all the requested applicable information;
- The appropriate application fee according to the Aquatic & Wetland Resources Fee Schedule;
- Proof of ownership or legal interest in the property (i.e., Warranty Deed) where the project will occur (include corporate records showing authorized individuals for corporate owners);
- A location / street map with the project site identified (maps);
- A sketch and legal description of the subject property, preferably scaled, clearly depicting the existing site conditions; and
- One (1) set of legible plan views and cross-sectional drawings clearly depicting both the existing and proposed site conditions (final engineering plans and/or additional data may be required prior to issuance).

### SECTION II: Project Summary

**Site and Background Information:**

<table>
<thead>
<tr>
<th>Project name:</th>
<th>Total site acres:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street address:</td>
<td>Total project acres:</td>
</tr>
<tr>
<td>City:</td>
<td>Zip code:</td>
</tr>
<tr>
<td>Folio number(s):</td>
<td>Drainage District:</td>
</tr>
</tbody>
</table>

Provide details of the proposed activity in, on, over surface waters or wetlands:

List any previous Federal (USACE), State (FDEP/FWMD), County, or Local permits, licenses, or enforcement actions for the project site:

Times, dates and attendees for any pre-application meetings or correspondence with County staff:
SECTION III - Contact Information

<table>
<thead>
<tr>
<th>Owner of land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Title and Company:</td>
</tr>
<tr>
<td>Street address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Telephone:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Applicant (if different from owner - provide proof of authorization: e.g. easement, lease, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Title and Company:</td>
</tr>
<tr>
<td>Street address:</td>
</tr>
<tr>
<td>City:</td>
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<tr>
<td>Telephone:</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Authorized representative (e.g. agent, consultant, contractor, attorney, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Title and Company:</td>
</tr>
<tr>
<td>Street address:</td>
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<tr>
<td>City:</td>
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<tr>
<td>Telephone:</td>
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</table>

<table>
<thead>
<tr>
<th>Contractor to do work (if different from above - must be provided prior to commencement)</th>
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</thead>
<tbody>
<tr>
<td>Name:</td>
</tr>
<tr>
<td>Title and Company:</td>
</tr>
<tr>
<td>Street address:</td>
</tr>
<tr>
<td>City:</td>
</tr>
<tr>
<td>Telephone:</td>
</tr>
</tbody>
</table>

SECTION IV: Project Details

PART I: DOCKS

A - Provide the following information for any existing docks at the site:

Marginal dock terminal platform dimensions: Length: ______ ft; width: ______ ft; area: ______ sq. ft.
Over-water width of structure as measured from the wet face of the seawall panel: ______ ft.
Number (_______) length, and width of existing fingerpierces (if applicable): ______ X ______ ft.
Over-water area of existing structures (measured from MHW line or seawall wet face): ______ sq. ft.
Number of existing mooring slips at the site: ______ Maximum draft of vessels at the site: ______ ft.
Existing structures: ______ to be removed / ______ to remain / ______ to be modified (check all that apply)

B - Provide the following information for any proposed/new dock construction at the site:

Marginal dock terminal platform dimensions: Length: ______ ft; width: ______ ft; area: ______ sq. ft.
Over-water width of structure as measured from the wet face of the seawall panel: ______ ft.
Number (_______) length, and width of new fingerpierces (if applicable): ______ X ______ ft.
Over-water area of new structures (measured from the MHW line or seawall wet face): ______ sq. ft.
Number of new mooring slips at the site: ______ Maximum draft of vessels at the site: ______ ft.
C - Finished Project Configuration:

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Maximum width of structure as measured from the wet face of the seawall panel: ____ ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of X ____ ft.</td>
<td>length, and width of all fingerpier piers (if applicable):</td>
<td></td>
</tr>
<tr>
<td>Total over-water area of the finished dock configuration (measured from the MHW line or seawall wet face): ____ square ft.</td>
<td></td>
<td></td>
</tr>
<tr>
<td># of vessels/mooring areas at the site: ____</td>
<td>Maximum draft of vessels at the site: ____ ft.</td>
<td></td>
</tr>
</tbody>
</table>

Note: Large docks may also require installation of a riprap footer at the base of the seawall. Refer to the County’s riprap policy for further guidance. If required, depict the riprap on the plans.

Additional information to be included on the project drawings/exhibits (if applicable):
- Accurate dimensions (length and width) for all structures over water measured from the wet face of the seawall panel (i.e., seawall cap, fixed/floating docks, piers, boatlifts, floating platforms, etc.)
- Mean High Water Level (MHW), Mean Low Water Level (MLW), and the elevation of the substrate in the mooring area(s) (referenced to NGVD, NAVD, or Mean Sea Level).
- The maximum elevation (or height) above MHW of the proposed dock or seawall cap.
- The width of the adjacent water body.
- The total linear feet of shoreline owned by the applicant.
- The volume of riprap to be installed; and
- A bathymetric survey of the project area referenced to mean low water, NGVD, or NAVD.

Additional information needed for multifamily docking facilities, marinas and dry stacks:
- The current Marine Facility Operating License Number (MFOL#): ____
- The required New Slip Fees (25% of the total new slip fees is due at time of application).
- The number of existing wet, dry, and/or trailer slips shown on an "existing conditions" drawing (documentation of historical use is required for any existing slips).
- The number of proposed wet, dry, and/or trailer slips shown on a "proposed conditions" drawing.
- The locations of any sewage pump-out facilities, fueling facilities, fish cleaning stations, and/or liveaboard docking proposed.
- The proposed upland site plan if upland development/redevelopment/modification is proposed; and
- A bathymetric survey of the project area referenced to mean low water, NGVD, or NAVD.

PART 2: SHORELINE STABILIZATION

Type of construction (check all applicable):

- Geotube
- Riprap
- Interlocking revetment
- Footer
- Batter/T-King piles
- Cap
- Concrete panel
- Sheet piling
- New seawall in front of existing seawall removal and replacement
- New wall where no wall previously existed
- Existing wall to remain
- Existing wall to be removed
- Other:
### Structural Dimensions:

<table>
<thead>
<tr>
<th>Distance from existing seawall wet face to the new seawall wet face (show on the drawings):</th>
<th>ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Seawall Type:</td>
<td></td>
</tr>
<tr>
<td>New seawall length:</td>
<td>ft</td>
</tr>
<tr>
<td>Width of new gap over water:</td>
<td>ft</td>
</tr>
</tbody>
</table>

### Additional Information Necessary for Shoreline Stabilization Projects:

- Location of and distance from the existing seawall face in relation to the adjacent seawalls or permanent structures;
- Project plans depicting a natural limestone riprap berm with (1-3 ft clc) at a 2:1 (horizontal:vertical) slope beginning one foot above mean high water for projects in tidal waters where no wall previously existed; and
- A detailed discussion of project methodology and turbidity control measures.

### Part 3: Creation or Alteration of Surface Waters

<table>
<thead>
<tr>
<th>Fill area:</th>
<th>acres</th>
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</thead>
<tbody>
<tr>
<td>Dredge area:</td>
<td>acres</td>
</tr>
<tr>
<td>Fill volume:</td>
<td>cubic yards</td>
</tr>
<tr>
<td>Dredge volume:</td>
<td>cubic yards</td>
</tr>
<tr>
<td>Upland excavation area:</td>
<td>acres</td>
</tr>
<tr>
<td>Upland excavation volume:</td>
<td>cubic yards</td>
</tr>
<tr>
<td>Max. dredge depth:</td>
<td>NGVD/NAVD or MLW</td>
</tr>
<tr>
<td>Total/gross earthwork volume:</td>
<td>cb. yards</td>
</tr>
<tr>
<td>Seasonal HML (for fresh water projects) or MLW (for tidal projects):</td>
<td>NGVD/NAVD</td>
</tr>
</tbody>
</table>

Reason for dredging and/or filling: __________

The following additional information is also needed for dredge and fill projects:

- A detailed description of the methodology and sequencing of dredging activities, turbidity control and monitoring, and disposal of spoil material (including locations, volumes, retention plans and locations/dimensions of disposal cells);
- The required lake slopes of 4:1 (horizontal:vertical) to a minimum of 4 feet below the ordinary high water elevation clearly labeled on the drawings; and
- A detailed description of the baseline bathymetry/topography for the project and adjacent waters.

### Part 4: Mangrove trimming or alteration

<table>
<thead>
<tr>
<th>Number, square footage, or acreage of mangroves to be trimmed:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number, square footage, or acreage of mangroves to be altered:</td>
</tr>
<tr>
<td>Current maximum height:</td>
</tr>
<tr>
<td>Areal coverage present:</td>
</tr>
<tr>
<td>Proposed trimmed height:</td>
</tr>
<tr>
<td>Areal coverage removed:</td>
</tr>
</tbody>
</table>

Description of the proposed project/ scope of work: __________
**Broward County Environmental Engineering and Permitting Division**

**Additional information needed for mangrove trimming/alteration projects:**
- [ ] copies of any prior licenses for mangrove trimming, alteration, and/or mitigation at the site;
- [ ] copies of any prior enforcement actions/cases;
- [ ] Linear footage of mangrove dominated shoreline owned/controlled by the applicant [ ]
- [ ] the percentage of mangroves on-site to be trimmed (as measured by canopy) [ ]
- [ ] Will a Professional Mangrove Trimmer be conducting the work? [ ] No [ ] Yes;
- [ ] a description of the type and scope of trimming will be conducted? (check any/all that apply):
  - window trim
  - height reduction
  - thinning
  - lateral trim
  - other [ ]
- [ ] a detailed discussion of impact avoidance/mitigation measures considered/implemented; and
- [ ] a detailed mitigation plan for altered mangroves (lost canopy must be replaced within 5 years).

**PART 5: WETLANDS (FRESHWATER OR TIDAL)**

<table>
<thead>
<tr>
<th>Amount of wetlands on site:</th>
<th>square feet</th>
<th>acres (must depict wetlands on drawings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How wetland limits were determined:</td>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>Has the County conducted a wetland jurisdictional determination on the property? [ ] No [ ] Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If yes, attach a copy of the determination and/or provide the file number [ ]

<table>
<thead>
<tr>
<th>Wetland to be Filled:</th>
<th>acres</th>
<th>Fill volume:</th>
<th>cubic yards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wetland to be Dug:</td>
<td>acres</td>
<td>Dredge volume:</td>
<td>cubic yards</td>
</tr>
<tr>
<td>Max. Depth of Dredging:</td>
<td>NGVD/NAVD</td>
<td>Seasonal H.W.:</td>
<td>NGVD/NAVD</td>
</tr>
</tbody>
</table>

**Additional information necessary for wetland mitigation projects:**
- [ ] a detailed discussion of all site development constraints, design alternatives considered, and impact avoidance/mitigation measures implemented prior to arriving at the current site plan;
- [ ] preliminary LIMAN, WATER, or N-WRAP calculations;
- [ ] draft mitigation plan which, at a minimum, includes details of the mitigation area, proposed grading contours at 5-foot intervals, and monitoring, maintenance, and planting plans; and
- [ ] the required monitoring fee (4% of the initial license fee for each of the 5 years of the monitoring period) is required before license issuance for all projects which are required to provide mitigation.

**PART 6: VOLUNTARILY CREATED WETLANDS**

**Current site conditions:**

<table>
<thead>
<tr>
<th>Seasonal High Water Elevation or Control Water Elevation:</th>
<th>(NGVD or NAVD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavation area:</td>
<td>square feet</td>
</tr>
<tr>
<td>Excavation volume:</td>
<td>cubic yards</td>
</tr>
</tbody>
</table>

**Final disposal location of excavated materials:**

- Is a connection to existing surface waters proposed? [ ] Yes [ ] No
- Is the proposed wetland part of the stormwater treatment system? [ ] Yes [ ] No

**Additional information needed for voluntary wetland creation projects:**

- [ ] a proposed planting plan, and
- [ ] a copy of a sketch and legal description of the voluntary creation area.
SECTION V: Certifications and Signatures

Part 1: Owner/Applicant Certification
By signing below I ____________________________ certify the following:

a) I understand this is an application and not a license, and that work prior to approval is a violation.
b) I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate.
c) I further certify that I possess the authority to undertake the proposed activities.
d) I understand that I may have to provide additional information/data that may be necessary to show that the proposed project will comply with Sections 27-331 through 27-341, titled Aquatic and Wetland Resource Protection, of the Natural Resource Protection Code.
e) Should the information I provide not be adequate for review, I understand that the Department is not obligated to issue a comprehensive completeness summary.
f) In addition, I agree to provide entry to the project site, for inspections with proper identification, for the purpose of reviewing the site as covered by the scope of Sections 27-331 through 27-341, titled Aquatic and Wetland Resource Protection, of the Natural Resource Protection Code.
g) Further, I hereby acknowledge the obligation and responsibility for obtaining all of the required federal, state, and local permits before commencement of construction activities.
h) If a license is issued, I agree, on behalf of the applicant, to construct and maintain the project in compliance with the license conditions, unless the Department authorizes transfer of the license to another entity.
i) I understand that knowingly making any false statement or representation in this application is a violation of Section 373.435, F.S. and 18 U.S.C. Section 1001.
j) Should a County Environmental Resource License be granted, I hereby certify that I will comply with all general and specific conditions of that license as well as the Broward County Natural Resource Protection Code (Chapter 27, Ord. 60-49) as amended.

Signature of Owner/Applicant ____________________________

Date ____________________________

Typed/Printed Name of Owner/Applicant ____________________________

Corporate Title (if applicable) ____________________________


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6 of 8
Part 2: Designation of Authorized Representative
(The applicant/owner should sign this section if he/she is authorizing an agent, consultant, contractor or other individual to act on his/her behalf)

By signing below I hereby designate:

Individual Name (printed):

Company Name:

as my representative in the processing of this application, and authorize the representative to furnish supplemental information and documentation in support of the application on my behalf. In addition, I authorize this representative to bind me, or my Corporation, to perform any requirements which may be necessary to procure the license for authorization as indicated above.

Signature of Owner/Applicant

Date

Part 3: Authorized Representative Certification
(if Part 2 above is completed by the applicant this section should be certified by the agent/contractor authorized in Part 2 above)

By signing below I certify the following:

e) I understand this is an application and not a license, and that work prior to approval is a violation.
b) I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate.
c) I understand that I may have to provide additional information/data that may be necessary to show that the proposed project will comply with Sections 27-331 through 27-341, Title 12 Aquatic and Wetland Resource Protection, of the Natural Resources Protection Code.
d) Should the information I provide not be adequate for review, I understand that the Department is not obligated to issue a comprehensive Compliance Summary.
e) In addition, I agree to provide entry to the project site, for inspectors with proper identification, for the purpose of reviewing the site as covered by the scope of Sections 27-331 through 27-341, Title 12 Aquatic and Wetland Resource Protection, of the Natural Resources Protection Code.
f) Further, I hereby acknowledge the obligation and responsibility for obtaining all of the required federal, state and local permits before commencement of construction activities.
g) If a license is issued, I agree on behalf of the applicant, to construct and maintain the project in compliance with the license conditions, unless the Department authorizes transfer of the license to another entity.
h) I understand that knowingly making any false statement or representation in this application is a violation of Section 373.430, F.S. and 16 U.S.C. Section 1601.
i) Should a County Environmental Resource License be granted, I hereby certify that I will comply with all general and specific conditions of that license and with the Broward County Natural Resource Protection Code (Chapter 27, Ord. 00-40, as amended).

Signature of Authorized Representative

Date
### Part 4: Contractor Certification

If different from the authorized representative in Part 3 above:

<table>
<thead>
<tr>
<th>By signing below I voluntarily certify the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) I understand this is an application and not a license, and that work prior to approval is a violation.</td>
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<td>(b) I hereby acknowledge the obligation and responsibility for obtaining all of the required federal, state and local licenses before commencement of construction activities.</td>
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<tr>
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</tr>
<tr>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of Contractor</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of Corporation/Business</th>
<th>Corporate Title (if applicable)</th>
</tr>
</thead>
</table>

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Environmental Resource Licenses (ERL)

Typical Application Issues:

- Application incomplete;
  - No work description or details,
  - Missing authorization signatures or
  - Designation of agent;
- Signed & sealed plans incomplete;
- Riprap required but not shown;
- Resource survey not submitted;
- Application info does not match plans;
- Application fees not submitted
- New boat slips proposed but manatee protection fee not submitted
Broward County Environmental Engineering and Permitting Division

Environmental Resource Licenses (ERL)

Signed & sealed plans (Rule 61G15, Ch 23 FAC)

Electronic s/s plans – includes language as shown below and s/s SHA report

Digitally s/s plans

Acceptable Example

This item has been electronically signed and sealed by [Licensee, PE] on [DATE] using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.

Within the documents themselves, if a digitally created seal is not used, the required text is to appear where the signature would normally appear.

Acceptable Example


This item has been electronically signed and sealed by [Licensee, PE] on [DATE] using a SHA-1 authentication code.

Printed copies of this document are not considered signed and sealed and the SHA-1 authentication code must be verified on any electronic copies.
Signed and sealed plans

When a professional engineer signs, dates, and seals a document, it is assumed that:
1) it conforms to all engineering standards;
2) safeguards the life and property of the public; and
3) accurately represents the project existing and proposed conditions.

Chapter 27-63 (b)(1):
“The license may be revoked or suspended if it is found that the license holder or its agent submitted false or inaccurate information in the application...”
Riprap Requirement for Over-Water Structures and Seawalls

Over-water Structures

Over-water structures should be designed to minimize impacts to benthic resources that result from shading or construction. The Department has determined that over-water structures with a width greater than 8 feet create the potential for substantial cumulative environmental impacts. To avoid such impacts, the following guidelines have been established:

- An over-water structure that qualifies for a "General License", i.e. it is less than 500 square feet or is an exact replacement of an existing dock, does not require riprap. For example: a 10 foot-wide by 50 foot-long structure does not require riprap.

- An over-water structure with a width less than 8 feet, no matter what the length is, does not require riprap. For example: a structure that is 6 feet-wide by 100 feet-long does not require riprap.

- An over-water structure with a width of 8 feet and a length less than or equal to 100 feet does not require riprap. For example: a structure that is 8 feet-wide by 90 feet-long does not require riprap.

- An over-water structure with a width of 8 feet and a length greater than 100 feet requires riprap under the portion of the structure that exceeds 100 ft. For example: a structure that is 8 feet-wide by 130 feet-long requires riprap under 30 feet of the structure.

- An over-water structure with a width greater than 8 feet will require riprap under the entire length of the proposed structure. For example: a 10 foot-wide by 80 foot-long structure will require riprap under all 80 feet of the structure.

The width and area of an over-water structure are measured from the wet face of the existing seawall panel to the most waterward point of the proposed structure. Natural limestone boulder riprap shall be placed under the proposed structure starting at one foot below mean high water and continuing at a 2 horizontal: 1 vertical slope ratio. Riprap should not extend past the structure, but should be placed so that full tidal flushing is achieved. Riprap must be verified by staff once construction is complete.

New Seawalls (Tidal Water Bodies Only)

Per Section 27-337(b)(5), "all vertical bulkheads or seawalls constructed in marine waters where no previous seawall existed shall be provided with natural limestone riprap, or other approved habitat enhancement, at the waterward face of the bulkhead or seawall."

Riprap should be placed at the face of the seawall starting at one foot above Mean High Water (MHW) and continuing at a 2 horizontal: 1 vertical slope ratio. Riprap must be verified by staff once construction is complete.
Environmental Resource Licenses (ERL)

Riprap
Seawall Repairs

Include width of new seawall / footer from wet face of existing seawall
Floating docks and platform lifts require licensing

There is a new stand-alone GL for just FVPs.
Turbidity control plan

Green lines are not proper deployment.
What we don’t want to see.....
What we don’t want to see.....
Working as it should!
Resource Surveys

Purpose: To ensure resources within project area are adequately identified, characterized and protected.

- Must be performed by a person with experience in seagrass identification and marine biology
- Includes:
  - Survey date and time;
  - Qualifications and signature of the field personnel;
  - Tide data, water temperature, weather conditions;
  - Sampling methodology;
  - Maps of survey area and transect locations;
  - Results;
  - Map of resources; and
  - Photos
- Required for all projects east of US1 and suggested for all projects
What if resources are found?
Resources include seagrasses, corals, mangroves and wetlands.

• First priority - avoidance
  • Eliminate portions of structures over seagrass
  • Fiberglass grating over seagrass

• Second priority - minimization through design
  • T-dock through mangrove fringe
  • Coral relocation

• Third priority - mitigation for impacts
  • Unified Mitigation Assessment Method (UMAM, 62-345 F.A.C.)
What are seagrasses?

Underwater flowering plants that require sunlight for growth; often confused with algae

Why are seagrasses so highly protected?

• Provide food, habitat and water quality.
• Serve as nursery grounds for commercially important fish and shellfish species.
• Perform important physical functions, such as filtering coastal waters, dissipating wave energy, and stabilizing sediments.
• Connect other shallow water habitats, such as mangroves, coral reefs, and salt marshes.
Turtlegrass in the Florida Keys
**Halophila decipiens**
*(Paddlegrass)*

- Similar to Johnson’s seagrass
- Oblong-elliptical leaves, 10 to 25 mm long and 3 to 6 mm wide
- Veins in the leaves emerge from the midrib at 60 degree angles
Paddlegrass
Halophila johnsonii
(Johnson’s seagrass)

- Similar to paddlegrass
- Oblong-elliptical leaves, 10 to 25 mm long and 3 to 6 mm wide
- Veins in the leaves emerge from the midrib at 45 degree angles
- Classified as “threatened” under the Federal Endangered Species Act (1998)
Johnson’s Seagrass
Johnson’s seagrass
**Halodule wrightii**  
*(Shoal grass)*

- Flat leaves, with a width of 1 to 3 mm and length of 10 to 20 cm.
- Tips of the leaves contain two or three points, which distinguish this species from turtle grass.
Delegation Agreements:

1. Environmental Resource Permit (ERP)
   - Delegated in 2001;
   - In areas not colored on map (and sovereign submerged land).
   - Issued with ERL as one document.

2. Regulation of Mangroves
   - Delegated in 1996
Mangroves

What are mangroves?

- Trees which are uniquely adapted to grow and reproduce in tidal waters. Each of the three species has its own adaptations and tolerances for salinity and water depth.
- Mangrove Trimming and Preservation Act 1996 (Sections 403.9321-403.9334, Florida Statutes).

Why are mangroves protected?

- Water Quality
- Productivity
- Habitat
- Economic Benefit
- Storm Protection
- Erosion Control
Red mangrove (*Rhizophora mangle*)

- Prop roots
- Leaves are glossy green on top and light green beneath, often with black spots
- Propagules
Red mangroves
Black mangrove (*Avicennia germinans*)

- Pneumatophores are often present coming up from the ground around the tree
- Leaves are dark green on top and silvery green on bottom, are often covered with salt crystals.
Black mangrove
White mangrove (*Laguncularia racemosa*)

- Leaves are light green on both sides
- Tip of leaf is often notched
- Stem has two salt glands just below the leaf
White mangroves
Marine Facility Operating Licenses

- Required for all non-single family parcels ≥ 5 boat slips;
- Annual fee/slip;
- License must be posted at facility;
- Single family homes are exempt;
- ERL required to add any new slips.

Renewals:
Samantha Jarvis:
sjarvis@Broward.org
954-519-1471
Wetland Determinations

Determination of the wetland boundary:

- Requires ownership or contract for purchase;
- Fee based on size of property;
- Report with diagram prepared for applicant;
- License requirements indicated.
- Determination is valid for two years.

Please do not issue citations for “overgrowth” without a wetland determination.
Chapter 27-337 (b):

(6) Wetland impacts will not be licensed where an upland alternative is practical.

(7) Wetland impacts will be avoided or minimized to the greatest extent possible.

(8) Wetland losses that are unavoidable shall be replaced by compensatory mitigation...
Multi-habitat wetland mitigation project
Avoid enforcement:

- Make sure application and drawings match proposed project;
- Read the license carefully when issued;
- Keep a copy of the license at work site;
- Train employees regarding license requirements;
- Have turbidity monitoring equipment on site;
- Submit required reports, logs, documents, etc.;
- Notify Agency 24/7 hotline if a problem occurs; and,
- If you have a question, call us!
Contact us:

Linda Sunderland 954-519-1454
lsunderland@Broward.org

Michelle Decker 954-519-1205
mdecker@Broward.org

Brandon Justice 954-519-1228
bjustice@Broward.org

Kristen Scheffer 954-519-1266
kscheffer@Broward.org

Allan Fisher 954-519-1434
Afisher@Broward.org

Environmental Hotline: 954-519-1499 (24/7)

General Email: AWRLicense@Broward.org
Thanks!
CLEANUP AND WASTE REGULATION
REMEDY, RESTORE, REUSE

David Vanlandingham, P.E.
Environmental Engineering and Permitting Division
(954) 519-1478
DVanlandingham@Broward.org
Contaminated Sites in Broward

- 808 contaminated sites.
- Some sites have multiple discharges.
- Includes 154 sites that have been closed with land use restrictions because contamination remains in place.
- Includes a range of contaminant types, including petroleum, solvents, and arsenic.
- 1851 contaminated sites have been addressed.
- Map and Searchable/Downloadable database of contaminated sites:
  http://www.broward.org/Environment/ContaminatedSites
Our Cleanup Work

- **Petroleum Restoration Program (Old Sites)**
  - Based upon priority score.
  - FDEP working to assess the backlog.

- **EAR Licensed Sites**
  - License is really a consent order, not a traditional license or permit
  - Discovery requirements in 27-355, BCC
  - Usually through due diligence market or new discharges
  - Golf courses, nurseries, and ag lands, former landfills/lakefills

- **Brownfield Redevelopment Program**
Site Assessment
Permits/Approvals Related to Contamination and Solid Waste

- EPGMD conducts environmental reviews of construction plans prior to municipal approval; 27-66(h), BCC

- BC Planning Council Requirements for Golf Courses

- Dewatering plan approved pursuant to 27-355, BCC and 27-353(i), BCC.
Responsible Reuse Issues

Construction approval of contaminated sites:

- Buildings/structures over contaminant plumes
- Accessing remaining contamination to continue cleanups
- Preservation of wells and other infrastructure
- Vapor mitigation systems to address indoor air concerns for volatile contaminants or methane
Dewatering Plan Approval

- Dewatering prohibited within ¼ mile of a contaminated site without EPGMD approval.

- A certified Dewatering Plan must be submitted to demonstrate that contamination will not be spread or discharged.
Certified Dewatering Plan

- Not a delegated review from the FDEP or SFWMD.
- Must be certified by a PG or PE, as applicable.
- There is no application, just submit the Plan per our on-line SOP.
- There is no review fee.
- Reviews are conducted within 10 business days.
Project Orientation with Cleanup Staff

- Prepare soil and groundwater contaminant maps and tables of most recent data.

- Prepare development conceptual plans detailing:
  - Location of plume and associated wells.
  - Proposed buildings, parking lots, etc.
  - Stormwater management systems
  - Landscaped areas, green spaces
  - Future parceling
Effective Project Planning:
Do Your Homework!

Has contamination been fully assessed? Are there data gaps?

Has communication been established with municipal planning and zoning staff?

Where will buildings be placed?

How will stormwater be managed?
  - Ponds, detention ponds to be dredged
  - French drains, injection wells

Are there geotechnical concerns?
  - Soils unsuitable for development (such as muck)
  - Solid waste
Effective Project Planning: Do Your Homework!

- Are land and groundwater use restrictions acceptable?
- Can parking lots, buildings, 2 feet of clean fill be used as engineering controls?
- Is dewatering necessary during construction?
- Can soils be re-used on site?
- Has the surrounding community been informed?