# **Relocate Hot Tub**

#### Overview

- Hot tubs can be moved out of the path of potential flood waters by moving them to an area on the property above the Base Flood Elevation line (BFE).
- In addition to the high likelihood of the hot tub being destroyed during the flooding event, the hot tub itself can be a hazard. Hot tubs can alter flooding conditions by increasing wave and/or debris impact forces for the structure and/or neighboring structures.
- If there is sufficient, unoccupied space on the property above the BFE, the hot tub could be moved to a less flood prone location.
- If there is not sufficient, unoccupied space on the property that is above the BFE, it may be safer to remove the hot tub completely or reinstall it on a deck above the BFE.
- If re-installing the hot tub on a deck above the BFE, a contractor and/or design engineer will need to ensure that the weight capacity of the deck is sufficient for the hot tub.

#### **Movement Considerations:**

- The hot tub should be drained prior to movement.
- After draining, the hot tub should be thoroughly inspected to ensure there isn't existing damage which could be exacerbated by movement.
- The hot tub should be cleaned extensively prior to movement.
- The yard in the new location may need to be graded prior to placement.
- New electrical outlets/panels may need to be installed.



#### **Key Takeaways**

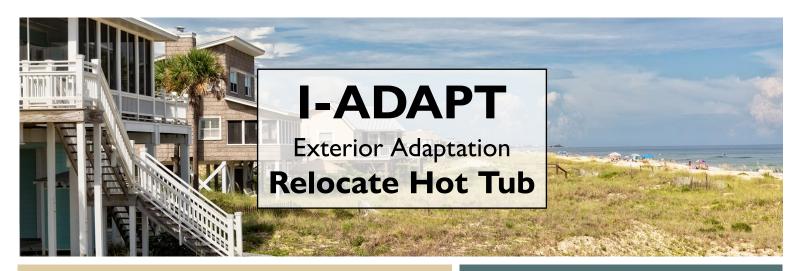
During flood events, water can cause extensive damage to any structure within the floodplain, including hot tubs.

Hot tubs can be severely damaged or destroyed in flooding events. Additionally, they can become a hazard during a flooding event.

In order to minimize damage costs and flood risk, hot tubs can be moved to a different location above the BFE on the property, if such a location exists.



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# **Estimated Costs/Benefits**

\*U.S. dollars (2022), estimates are subject to change

Potential Costs		Potential Benefits	
ltem	Estimate	Post-Flood Recovery Actions	Estimate
New electrical panel installation*	\$500-\$4,000	Hot tub and debris removal	\$150-\$300
Re-grade lawn in new hot tub area*	\$500-\$1,000		
Contracted labor	\$150-\$500	New hot tub	\$1,000-\$20,000
ESTIMATED TOTAL COST *if necessary	\$150- \$5,500	ESTIMATED TOTAL SAVINGS	\$1,150-\$20,300

# **Expected Maintenance**

• Regular hot tub maintenance.

## **Additional Resources**

- <u>FEMA P-348: Protecting Building Utility Systems from</u> <u>Flood Damage</u>
- FEMA P-499: Home Builder's Guide to Coastal Construction

#### Resources can also be found at <u>https://de.gov/iadapt</u>

## **Additional Actions**

- May need to re-grade lawn in new hot tub location prior to moving the hot tub.
- The original hot tub location may need to be landscaped after it is moved.
- New electrical outlets/panels may need to be installed depending on the new location of the hot tub.
- If the hot tub is attached to or part of a deck, the deck may need to be removed or renovated.

# **Permitting Agencies**

Contacts for permitting requirements include but are not limited to the following:

- Your city and/or county government for local flood ordinances or regulations
- Your city and/or county government for building permits
- o DNREC Coastal Construction Permit

#### Who to Contact

- Design professional or engineer
- $\circ$  General contractor

Technical definitions and more information are located on the I-ADAPT website: https://de.gov/iadapt.

This information is intended to be used for planning purposes. It is not intended to substitute or take precedence over the guidance of design engineers, contractors, utility companies or regulatory agencies.



For more information, contact DNREC's Division of Climate, Coastal and Energy at DNREC\_IADAPT@Delaware.gov