



# Floating Houses

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# Floating Houses

## Chronology – How We Got Here

- Section 26a of The TVA Act of 1933 requires that no dam, appurtenant works, or other obstruction affecting navigation, flood control, or public lands or reservations shall be constructed, operated, or maintained across, along, or in the Tennessee River or its tributaries until plans have been approved by TVA. By example, nonnavigable houseboats and floating houses are considered as obstructions.
- By the 1950's, nonnavigable houseboats began to appear on some TVA reservoirs and this trend continued through the 1960's and 1970's.
- In October 1971, TVA published regulations to address several related issues: flotation, treatment of sewage, harbor limits, assigning numbers, etc.; no new nonnavigable houseboats permitted after the 1971 regulations.

# Floating Houses

## Chronology – How We Got Here

- In 1977, TVA amended 26a regulations to prohibit nonnavigable houseboats except for those in existence before February 15, 1978. A nonnavigable houseboat under TVA rules means any houseboat not compliant with criteria regarding navigability, state, and federal requirements for vessels.
- In 2003, TVA clarified Section 26a rules for nonnavigable houseboats and added a provision governing sanitation.
- By 2000 - 2011, unpermitted new structures were being built with the primary design and use for habitation, not for recreational boating and navigation.

# Floating Houses

## Chronology – How We Got Here

- Owners of many structures installed a small motor and steering mechanism, and displayed a state boat registration number in an attempt to meet the criteria for navigability under TVA rules.
- Norris and Fontana Reservoirs saw the most growth in floating house construction.
- TVA also began to receive inquiries about constructing floating house subdivisions on TVA reservoirs.

# Floating Houses

## Beginning of NEPA Review

- A Notice of Intent was published in the Federal Register April 30, 2014, to conduct an environmental review in accordance with the National Environmental Policy Act (NEPA). A 90-day public comment period ended July 29, 2014.
- Five public scoping meetings were conducted in May and June 2014 and a report is available summarizing the comments and issues submitted by the public and other agencies.

# Floating Houses

## Prevalent Scoping Comments and Issues

- Safety of electrical, mooring, and anchoring systems
- Water quality: proper management of black and grey water
- Need stronger regulation, policing, enforcement
- Need minimum safety and environmental standards with regular inspection
- Economic, financial, and personal loss if prohibit/remove floating houses
- Grandfather floating houses and continue to allow nonnavigable houseboats
- Consider an annual fee to fund future management and oversight

# Floating Houses

## TVA Concerns



- Residential-type proposals on water
- Structures presented as houseboats but designed and used primarily for habitation at a fixed location

- Need to clarify or update regulations with changing times
- Owner/public/investor expectations



# Floating Houses

Examples: Nonnavigables - Manufactured Houseboats - Floating Houses



# Floating Houses

## Residential-Type Use / Harbor Limits



# Floating Houses

## Disposal and Removal from Reservoir

January 2011 – Moored in Marina



April 2013 – Report from Stakeholder



# Floating Houses

## Disposal and Removal from Reservoir

April 2013 – Report from Stakeholder



July 2013 – TVA Cleans up – Approximate Cost \$7,000



# Floating Houses

## Electrical Supply



# Floating Houses

## Anchoring



# Floating Houses

## Anchoring



# Floating Houses

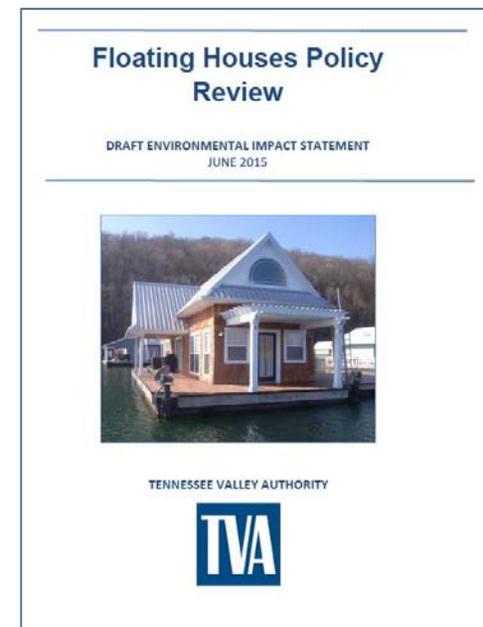
## Sewage Disposal (Black Water and Grey Water)



# Floating Houses

## NEPA Review and EIS Process

- A Draft EIS has been prepared to evaluate six policy alternatives for managing floating houses and nonnavigable houseboats
- Released on June 18, 2015
- Available for review at project webpage <http://www.tva.gov/floatinghouses/>
- Sixty-day public comment period ends August 18



# Floating Houses

## NEPA Review and EIS Process

- The NEPA review is programmatic in nature and applies to all TVA reservoirs
- A full range of possible management alternatives was analyzed
- Public meetings:
  - Bryson City, NC – July 9
  - LaFollette, TN – July 21
  - Parsons, TN – July 28
  - Johnson City, TN - August 18
  - Public webinar session – August 12 at 3 p.m. (EDT)
- TVA will address comments and questions submitted during the comment period in the final EIS

# Floating Houses

## EIS Management Alternatives

- No Action Alternative – Current Management
- Alternative A – Allow Existing and New Floating Houses
- Alternative B1 – Grandfather Existing and Prohibit New
- Alternative B2 – Grandfather but Sunset Existing and Prohibit New
- Alternative C – Prohibit New and Remove Unpermitted
- Alternative D – Enforce Current Regulations and Manage through Marinas and Permits

# Floating Houses

## EIS Management Alternatives

### **No Action Alternative – Current Management**

- TVA would continue to use discretion in enforcing its Section 26a regulations. Current regulations would not be updated and TVA would continue to rely on *18 CFR 1304, Subpart B: Regulation of Nonnavigable Houseboats*.

### **Alternative A – Allow Existing and New Floating Houses**

- Allow mooring of existing and new floating houses meeting minimum standards within permitted marina harbor limits. Require modification or removal of unapproved substandard structures. Update and enforce regulations to set minimum standards for safety and wastewater issues. Nonnavigable houseboats with pre-1978 permits allowed and not subject to new standards, if in compliance with current permit.

# Floating Houses

## EIS Management Alternatives

### **Alternative B1 – Grandfather Existing and Prohibit New**

- Allow existing floating houses meeting minimum standards within permitted marina harbor limits. Update and enforce regulations to set minimum standards for safety and wastewater issues. Nonnavigable houseboats with pre-1978 permits allowed and not subject to new standards, if in compliance with current permit. Prohibit new floating houses designed and used primarily for human habitation.

### **Alternative B2 – Grandfather but Sunset Existing and Prohibit New**

- Same as Alternative B1 except TVA would establish a sunset date (30 years or sooner) by which time all floating houses and nonnavigable houseboats must be removed from TVA reservoirs.

# Floating Houses

## EIS Management Alternatives

### Alternative C – Prohibit New and Remove Unpermitted

- Prohibit new and existing floating houses built primarily for human habitation rather than navigation or transportation. Continue to allow pre-1978 nonnavigable houseboats if compliant with a current permit. Removal within 18 months. Update and enforce regulations to replace the nonnavigable houseboat prohibition with a broader prohibition on floating houses. No new standards.

# Floating Houses

## EIS Management Alternatives

### **Alternative D – Enforce Current Regulations and Manage through Marinas and Permits**

- Enforce current TVA Section 26a regulations related to nonnavigable houseboats and manage the proliferation of floating houses indirectly through marina land use agreements, enforcement of harbor limits, and Section 26a permits. TVA would not update current regulations or standards and would require modification or removal of unapproved structures.

# Floating Houses

## Preferred Management Alternatives

- TVA's preference is to continue to allow pre-1978 nonnavigable houseboats in compliance with a current permit, and to permit (i.e. grandfather) existing unapproved floating houses, but only if the structures comply with new standards and requirements being considered by TVA.
- TVA is inclined to select either Alternative B1 or B2 as its final decision but welcomes public input on all the alternatives. The difference between B1 and B2 is under B1 these structures would be allowed indefinitely, while under B2 there would be a 30 year (or less) sunset period for all floating houses and nonnavigable houseboats to be removed from TVA reservoirs.

# Floating Houses

## Alternatives – More Explanation

- Under the No Action/Current Management Alternative and Alternative D, regulations and standards would not be updated. Floating houses could meet the criteria for navigability in Section 26a regulations (18 CFR 1304.101).
- Under Alternative C, TVA regulations would be clarified to prohibit floating houses. Pre-1978 nonnavigable houseboats compliant with current permits would be allowed but floating houses must be removed at owners expense within 18 months. TVA would seek enforcement/citation authority.
- Alternatives A, B1, and B2 would require updating regulations and new standards. TVA would seek enforcement/citation authority. The following slides are germane to A, B1, B2. (*18-Month Compliance Transition Period*) .

# Floating Houses

## Summary of Key Standards Under Consideration

### Electrical Safety

- For Utility supplied facilities, ground fault protection (GFCI) not exceeding 100 milliamperes at main marina feeder circuit, branch circuits, structure, or individual circuits. Generators or alternative power sources must also have GFCI protection not exceeding 100 milliamperes as close as possible to power source.
- Protect exposed and shallow water electrical cables where feasible by trenching or placing in cable trays or conduit; mark shallow water cables with buoys as appropriate.
- Comply with NFPA 70 standards (National Electric Code).

# Floating Houses

## Summary of Key Standards Under Consideration

### Floation

- Un-encased Styrofoam prohibited
- Permitted nonnavigable houseboats must replace un-encased Styrofoam flotation by a set deadline

### Waste Water Discharge

- Grey and black water discharge from floating houses prohibited on No Discharge Reservoirs
- At minimum on Discharge Reservoirs treat grey water and black water from floating houses through Marine Sanitation Device (MSD), or contain and pump out waste for treatment and disposal

# Floating Houses

## Summary of Key Standards Under Consideration

### Size Restrictions

- No expansion of existing structures allowed unless TVA deems essential for compliance with standards (such as additional holding tank capacity)
- If new floating houses are allowed under Alternative A, maximum size 1,000 square feet and 1 story; moored in marina slip with all utilities connected to slip

# Floating Houses

## Summary of Key Standards Under Consideration

### Mooring and Anchoring

- Mooring lines and cables may not be placed in such a way as to block or hinder access to any part of the reservoir
- Floating houses must not be moored in such a way as to create a navigation obstruction or hazard
- All anchoring system components must be installed within the TVA approved harbor limit area and located below and or immediately adjacent to the floating houses being moored
- Minimum spacing and separation requirements within marina harbor limits such as 6 feet minimum between adjoining floating houses

# Floating Houses

## Other Requirements Under Consideration

- TVA would consider exchange and retirement of one or more currently permitted pre-1978 nonnavigable houseboats for a new floating house meeting standards with equal footprint but no more than 1,000 square feet including decks and walkways
- Floating house owners pay an annual registration fee to TVA (fee TBD)
- Security assurance or cleanup deposit may be required to ensure owners are responsible for the proper removal and disposal of derelict or abandoned floating houses

# Floating Houses

## Other Requirements Under Consideration

- Owners certify initial inspection is completed by a required deadline. Inspect every 5 years documenting compliance with electrical, sanitary, flotation, and mooring standards.
- Marinas / floating house owners certify yearly the structure meets required standards.
- At TVA's request, marinas/owners provide records to document holding tanks on No Discharge Reservoirs are being pumped regularly and waste is properly disposed and treated.
- Pre-1978 nonnavigable houseboats must be in compliance with current TVA permit conditions. If not, the structure must comply with standards and rules for floating houses within 18 months or be removed from the reservoir.

# Floating Houses

## Next Steps

- Issue final EIS in late 2015. If required under the selected alternative, publish Notice of Proposed Rule Making in Federal Register for public comment
- Issue decision on policy and rules February 2016
- If required under the selected alternative, publish final regulations
- Updated regulations would likely be effective in 2016

# Floating Houses

## For Information – How to be Involved

- Visit TVA website: [www.tva.gov/floatinghouses/](http://www.tva.gov/floatinghouses/)
- Attend public meetings
- Submit comments via email ([fh@tva.gov](mailto:fh@tva.gov)), online, or by mail by August 18, 2015
- Invite TVA to meet with your group or association
- Invite TVA to visit your site or facility for discussion



# Questions?

# Floating Houses

Designed and Used for Navigation or Habitation?



# Floating Houses

## Locations of Floating Houses and Public Meetings

