

Timber Harvest Task Force Recommendations for modeling forest harvesting in Phase 7: Potential applications for federal facilities

April 2025 Federal Facilities Workgroup

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Timber Harvest Task Force background

- Convened in early 2023 at the request of the Forestry Workgroup and the Land Use Workgroup to help improve the mapping and modeling of forest harvest activities in the watershed
- Includes representatives from all watershed states
- Identified multiple opportunities to improve modeling of forest harvest for Phase 7
- Recommendations approved by partnership



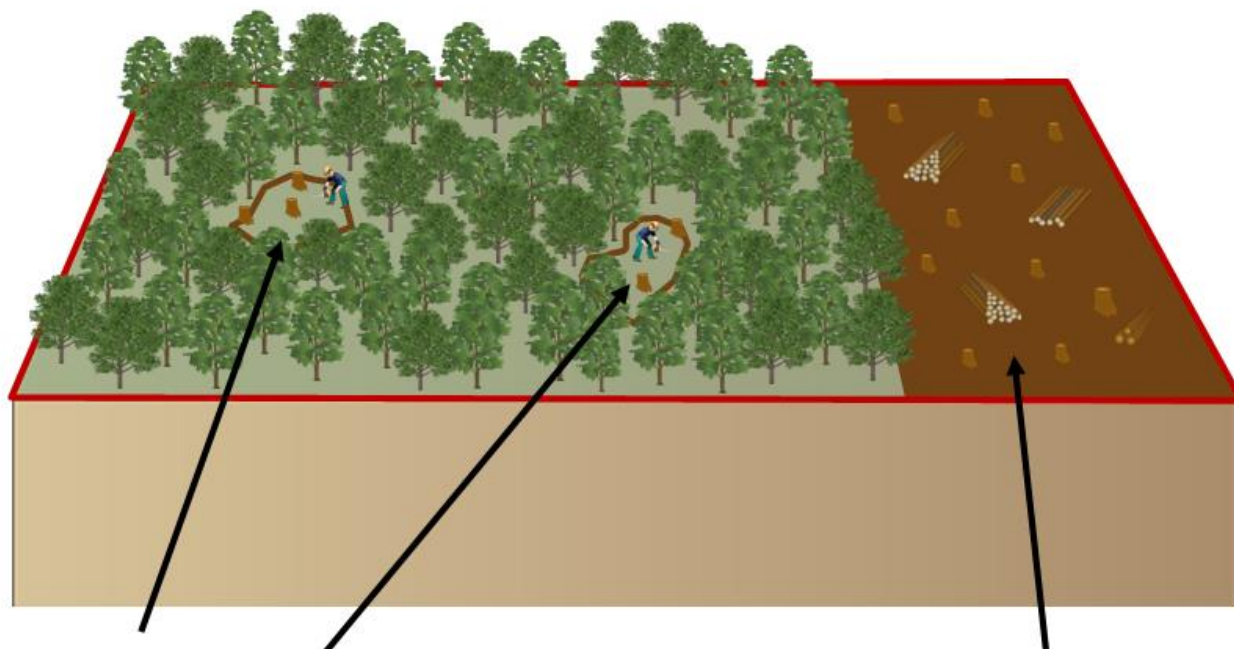
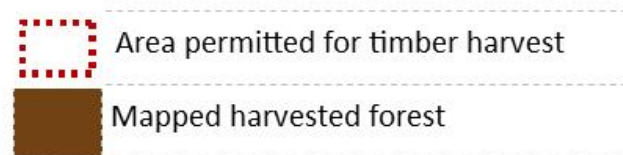
Changes for Phase 7

- Currently states are asked to report annual forest harvesting acres as part of their annual Progress reporting. States that don't report are assigned a default rate.
 - **The default rate for harvested forest will be changed from 1.5% of true forest to 1.1% of true forest.**
 - 1.1% was derived using FIA data to estimate the % of true forest that is harvested annually watershed-wide
- After a harvest, **land should continue to load as harvested forest for 3 years prior to reverting back to true forest** (it currently only stays in harvest for 1 year).
 - CAST harvested forest land use= land that has been harvested in the last 3 years
 - Base loads from harvested forests will be corrected for TN and TSS
- Forest harvesting BMP updates:
 - Credit duration will be extended from 1 to 3 years to align with the time that land will load as harvested forest
 - N reduction efficiency will be increased from 50% to 60%

Reconciling reported and mapped harvest data

Phase 6 Process

- Some states reports harvested forest acreage to CBP at county scale
 - Reported harvested forest acres are proportionately allocated to sub-county modeling units (land-river segments, LR Segs) by the CBP based on the relative amount of “true forest” within each unit
- States that don’t report harvested forest acreage have the default rate (currently 1.5%) applied proportionately based on the distribution of true forest across LR Segs
- USGS maps clearcuts every 4-5 years (and interpolates for intervening years)
- Both mapped and reported/default acres are subtracted from “true forest”
 - Clearcuts are getting double-counted! This is a particular issue for states with significant amounts of clearcuts



Small patches (e.g., thinning, selective cuts) of timber harvest within forests **will not** be accounted for in the high-res land use/land cover

Clear cut timber harvests **will** be accounted for in the high-res land use/land cover

FIA-derived estimates of more intensive harvests (2018)

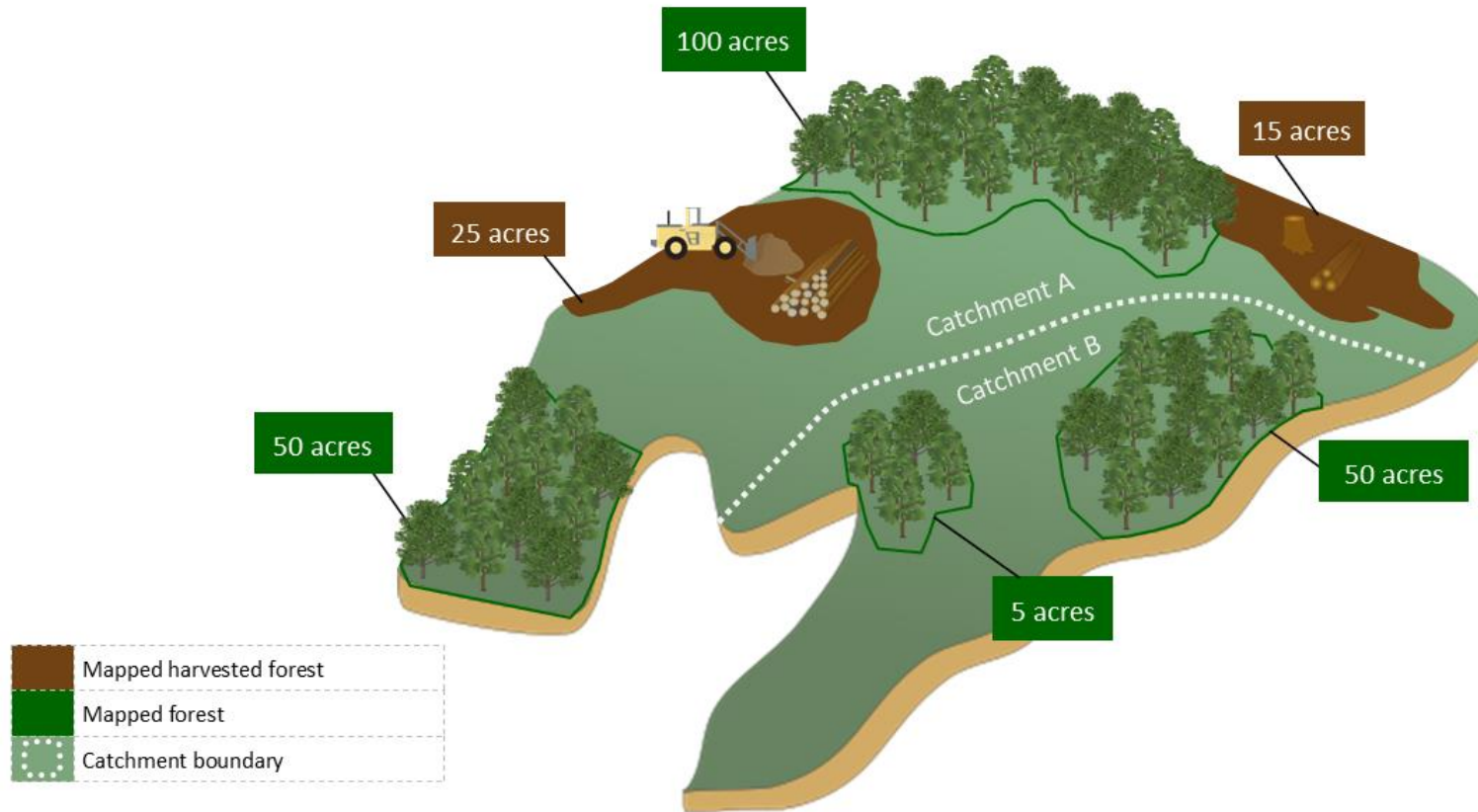
	% of harvests in "clearcut"
CBW	20.92%
DE	32.86%
MD	21.44%
NY	0.00%
PA	8.72%
VA	47.31%
WV	0.51%

Reconciling reported and mapped harvest data

Phase 7 approach:

- States continue to report harvest data at the county scale
- Reported data are spatially allocated to the harvested forest footprint up to the amount reported
- Any additional reported acres (above mapped acres) are distributed across NHD catchments within each county based on relative amount of “harvestable” forest in each catchment
 - “Harvestable” forest would be defined as forest patches >10 acres
 - “Harvestable” forest footprint would be updated with the LULC data (every 4-5 years)

County X reported 100 acres of harvested forest. The land use/land cover mapped 40 acres of harvested forest.
How do we reconcile the remaining **60 acres** of harvested forest?



Proposed Phase 7 Approach:

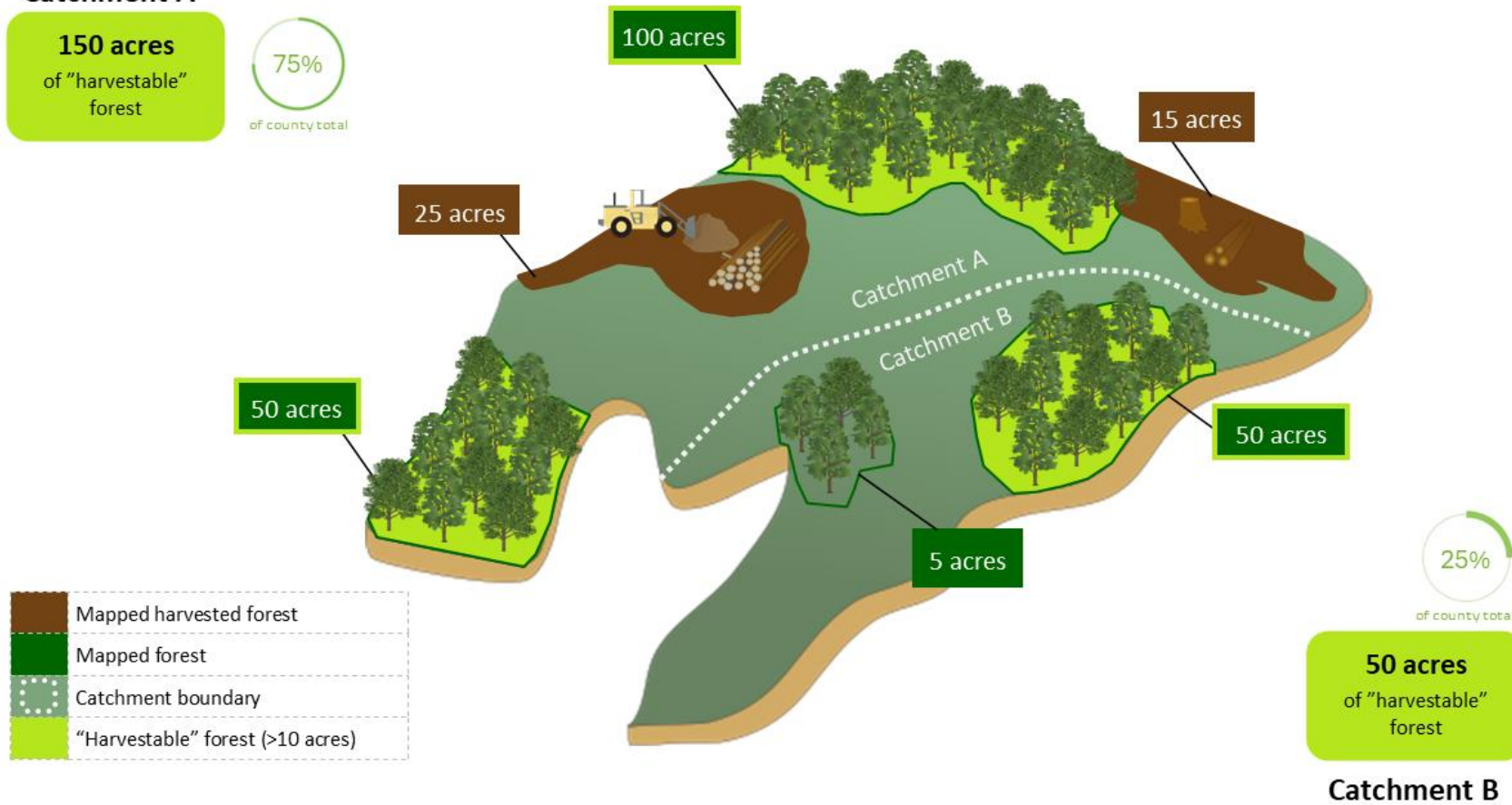
Identify large patches of harvestable forest (>10 acres) in which remaining acres of reported harvest data can be allocated.

County X reported 100 acres of harvested forest. The land use/land cover mapped 40 acres of harvested forest.
How do we reconcile the remaining **60 acres** of harvested forest?

Catchment A

150 acres
of "harvestable"
forest

75%
of county total

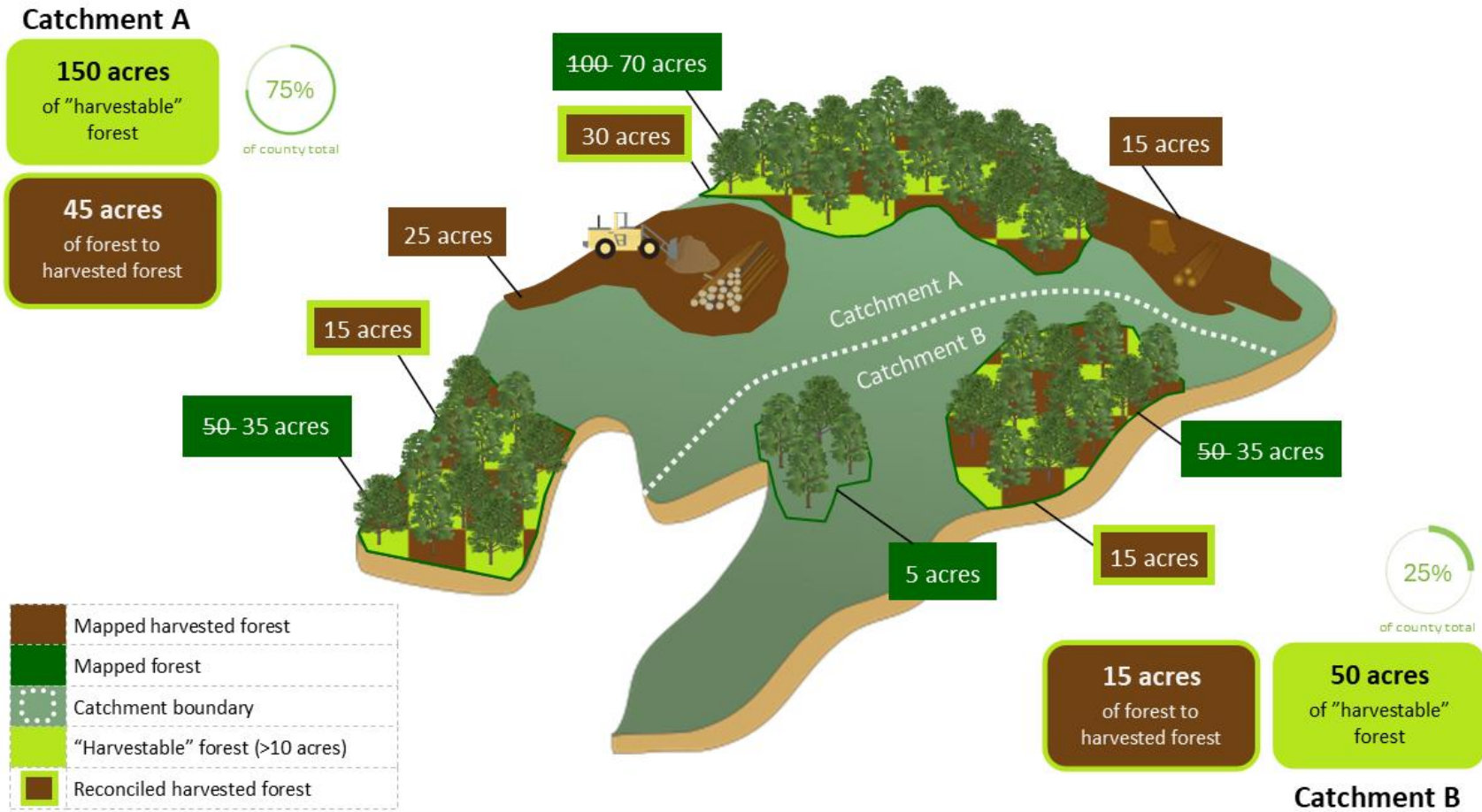


Catchment B

Proposed Phase 7 Approach:

Identify large patches of harvestable forest (>10 acres) in which remaining acres of reported harvest data can be allocated.

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How do we reconcile the remaining **60 acres** of harvested forest?



Proposed Phase 7 Approach:
Identify large patches of harvestable forest (>10 acres) in which remaining acres of reported harvest data can be allocated.

Potential approach for tracking forest harvesting on federal facilities

- Step 1: Reporting. Federal facilities should report annual acres harvested at the county scale if possible. If federal facilities do not report forest harvesting acres, options could include:
 - Assigning the facility a “default rate” (current state default= 1.1% of true forest).
 - FFWG would need to determine whether this state-level default rate is appropriate
 - If no harvesting occurred, a facility would need to indicate that annually in their reporting
 - Assuming no harvesting has occurred
- Step 2: Reconciling with mapped clearcut harvest acres from the CBP’s high-resolution land use data.
 - Follow the same procedures as states for allocating mapped and reported forest harvesting across NHD catchments in the facility footprint based on the relative amount of “harvestable” forest
 - For discussion: How would we deal with mapped clearcut acres for facilities that indicated they did not harvest (suggesting the mapped harvest acres are inaccurate?)