



Interim Forest Management Plan

Property Identifiers

Property Name and Designation: **Halls (Stockwell) Creek Fishery Area**

County: **Jackson**

Property Acreage: **789 Acres**

Forestry Property Code(s): **2711**

Property manager: **Dan Hatleli**

Master Plan Date: Concept Element Document – **1984**

Part 1: Property Assessment (1-2 pages maximum)

The following items should be considered during the property assessment. Not all sections may be relevant for all properties.

General Property Description

- Landscape and regional context
- History of land use and past management

The Halls Creek Fishery Area (HCFA) is a state owned property with the primary objectives of providing fishing, hunting and trapping opportunities, and protecting water quality. Halls Creek is in north central Jackson County, originating in southern Cleveland Township, and runs southeasterly to its confluence with the South Fork of Halls Creek on the upper end of Trow Lake, an impoundment of Halls Creek. Below Trow Lake, the remainder of the stream is a warmwater sport fishery containing smallmouth bass, walleye, muskellunge, and a few brown trout. Halls Creek is a tributary to the Black River. The upper segment of the HCFA lies within the Western Coulee and Ridges Ecological Landscape while the lower segment lies within the Central Sands Ecological Landscape. All of Halls Creek within the Fishery Area is Class II trout stream (13.19 miles) and considered an "Area of Special Natural Resource Interest" (ASNRI). An unnamed stream (12-6), which is a tributary to Halls Creek, is also included in the HCFA. All 3.72 miles of this stream is Class II trout water.

In 1959, the State of Wisconsin, through authority of the Wisconsin Conservation Department under chapter 23.09 of the Wisconsin Statutes and with federal aid approval, initiated a land acquisition program on this stream. Approximately 96.5 acres were acquired by Game Management for wetland preservation. In 1962, the Jackson County Fisheries Remnant Program was established by the Wisconsin Conservation Commission, the predecessor of the Natural Resources Board. Under the Dingell-Johnson Act, authorization was granted to acquire fish habitat lands on Halls Creek. Within the HCFA there are fee-title lands and easement lands. Total acreage of fee title, easement and other DNR lands is 892.

Several management practices have been completed on the acquired lands. Approximately 14 miles of fence line was built, primarily to exclude livestock from stream banks. In addition 14 cattle watering areas and 3 stream crossings were built. Approximately 20.9 miles of ownership and easement were posted with appropriate signage. Three large, wooden Fishing Area signs were installed.



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Past forestry management activities included thinning of pine plantations for a total of 189.4 cords and planting 81 acres with 73,150 red pines. The pine plantings included only portions of openings with considerable edge left for wildlife openings.

Electrofishing surveys of the fish populations in Halls Creek were conducted in various years from 1955 to present. Since 2007, 2 trend sites (surveyed annually) were established on Halls Creek. The stream contains fishable populations of both brook and brown trout with natural reproduction occurring for brook trout and limited natural reproduction for brown trout.

Beaver activity is common throughout the Fishery Area. Periodic removal of beaver dams and trapping are necessary to prevent damage.

PROPERTY CONTEXT/LANDSCAPE

Contextually, Halls Creek Fishery Area is situated in location that is heavily dissected and fragmented with agricultural fields and other open areas. Subsequently, opportunities for large block old forest development for area sensitive forest interior species are limited. However, the more fragmented setting offers great opportunities for "edge" game species and early successional "Species of Greatest Conservation Need" as identified within the state's Wildlife Action Plan. See below for species/opportunities.

WILDLIFE ACTION PLAN/SPECIES OF GREATEST CONSERVATION NEED

Species of Greatest Conservation Need associated with early successional forest, as well as the brushlands, shrub-car, and small openings of the property include; Blue-winged Warbler, Golden-winged Warbler, Brown Thrasher, Field Sparrow, American Woodcock, Blue-winged Teal, Whip-poor-will, Willow Flycatcher, and Pickerel Frog .

Aquatic Species of Greatest Conservation Need associated with Halls creek are Buckhorn, Fawnsfoot, Salamander Mussel , Aurora Damselfly, Barrens Snaketail, Clio Stripetail, Elusive Clubtail, Lancet Clubtail, Sand Snaketail, Ski-tailed Emerald, Spendid Clubtail, Skillet Clubtail, Green-faced Clubtail, Stygian Shadowfly, Zebra Clubtail, and Water Shrew.

Public Land

CONSERVATION OPPORTUNITY AREA

Halls creek itself is a Conservation Opportunity Area of Upper Midwest significance as identified within the Wildlife Action Plan due to its diverse invertebrate population. Ninety species of aquatic invertebrates (including eight species of mussels which is high for a stream of this size) and 28 fish species have been found here including 10 Wisconsin Special Concern taxa (of which three are globally rare)

NATURAL HERITAGE INVENTORY (NHI)/RARE SPECIES

No rare species are listed for the general area in the Natural Heritage Inventory database at the time of this writing.



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BIOTIC INVENTORY STATUS

A Biotic Inventory was completed for the stream itself with information found within the “Biotic Inventory and Analysis of the Black River State Forest/Meadow Valley Landscape-2005”

CULTURAL AND ARCHEOLOGICAL SITES (INCLUDING TRIBAL SITES)

The Fishery Area has Archeological sites located within its boundaries. Contact with the State Historical Society is required prior to any activities near known sites.

RECREATIONAL USE

Fishing, hunting, and trapping are the primary recreational uses of the property. Access is provided by numerous public road crossings and frontage.

Halls Creek contains 13.19 miles of Class II trout water and Creek 12-6 contains 3.72 miles of Class II trout water. Brook and brown trout are present in Halls Creek and brook trout are the dominant species in Creek 12-6. Hunting opportunities exist for whitetail deer, wild turkey, grouse, woodcock, squirrels, and black bear. Trapping opportunities exist for beaver and muskrats.

Other recreational uses:

- Hiking
- Wildlife Viewing
- Bird Watching
- Biking
- Berry Picking

INVASIVE SPECIES

Halls (Stockwell) Creek Fishery Area has no reports of invasive species on the property. All data from this area has not been updated since 2007, except for Comp. 210, which was updated in 2014.

All invasive species found on the property should be properly treated in a way that reduces impact on the property. Invasive species BMP's will be followed during timber sales and management practices will take into account the effects of these invasive species. Inventory will be updated as well to improve records of invasive species at Halls Creek Fishery Area.

SOILS

HCFA is located in the Driftless Area of Wisconsin. Bedrock geology of the area consists of PreCambrian granite overlain with Upper Cambrian sandstone. Predominant soil types located within the boundary are Norden, Hixton, and Northfield loams, and Boone sand. These are hilly, rolling and steep soils on dissected sandstone uplands with slopes of mostly 4 – 30%.

Current Forest Types, Size Classes, and Successional Stages



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Halls (Stockwell) Creek Fishery Area consists of 789 total acres made up of 314 forested acres (40%) and 475 non-forested acres. The forested acreage has multiple stands, including aspen, red maple, oak, red pine, and white pine.

Aspen stands make up 29 acres of the property, or 9% of its forested acres. This aspen is 50-70 years old and in the 11-15" dbh size class.

Red maple on the property makes up 118 acres or 38% of the forested acres. The majority of this red maple is 45-65 years old and in the 5-11" dbh size class. A small portion of the red maple is 10-25 years old and in the seedling and sapling size classes.

Oak on the property makes up 62 acres or 20% of the forested acreage. Most oak on this property is 80-110 year old black and red oak in the 11-15" dbh size class, with some oak in the 15+" dbh size class as well.

Pine on the property consists of 100 acres of red pine and 4 acres of white pine, totaling 33% of the forested acres. The pine has three age classes of similarly distributed acreages. These classes consist of 25 year old pine in the 5-9" dbh size class, to 45-55 year old pine in the 5-9-15" dbh size class, and finally to 65-75 year old pine in the 9-15" dbh size class.

Part 2: IFMP Components (1-2 pages maximum)

Forest Management Objectives:

These properties are managed primarily to restore habitat conditions within the stream corridor, protect water quality, and to provide quality wildlife habitat. Forest management objectives include maintaining existing forest types and developing a diversity of age classes focusing on young forest and maintaining small patches of old forest areas for both game and non-game species dependent on these types. This will largely be accomplished through sustainable silvicultural systems that will increase the diversity and structural complexity of wildlife habitat while at the same time avoiding disturbance to riparian areas along the stream corridor.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives):

1. Maintain oak cover types where feasible.
 - a. Diversify age classes with emphasis on developing younger stands
 - b. Crop tree release oak in young stands.
 - c. Regenerate oak stands where feasible and promote oak in young mixed hardwood stands.
 - d. Promote/retain larger diameter trees where feasible.
 - e. Increase standing dead snags and coarse woody debris
2. Maintain conifer cover types
 - a. Promote older, large diameter white pine for wildlife and aesthetics
 - b. Increase coarse woody debris in white pine area
 - c. Promote conversion of red pine plantations to hardwoods with emphasis on oak



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3. Red Maple
 - a. Promote species other than ash in the understory when conducting management
 - b. Promote some larger diameter trees where better soils exist
 - c. Increase standing dead snags and coarse woody debris
4. Aspen
 - a. Maintain aspen and diversify age classes with emphasis on developing younger stands.

Property Prescriptions (Identify specific and pertinent prescriptions by area or forest type, including passive management areas, extended rotation, and other information that will help achieve the objectives):

OAK – Most of the oak on the property is 80-110 years old. Smaller, even-age harvests, over the next 15 years will be used to diversify the oak age class. Maintain and promote oak through planting, timber stand improvement methods, thinning, coppice, overstory removal, shelterwood, and other techniques described in the DNR Silviculture and Forest Aesthetics Handbook. Promote the growth and retention of large oak through techniques such as thinning. Reserve/legacy trees should be retained as groups or individuals throughout the property within harvested stands to maintain a component of large mast trees and promote both snag trees and coarse woody debris for wildlife.

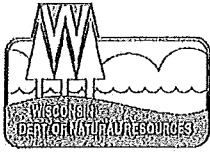
RED PINE/WHITE PINE – Thin red pine plantations and dry site white pine every 8-10 years or when stocking warrants maintaining healthy, vigorous stands. Thin the white pine stand from below to encourage older forest attributes such as large diameter trees, standing dead snags, and large coarse woody debris. Retain scattered trees that are not considered stands on the rest of the property as reserve/legacy trees. Leave dead and dying trees for wildlife habitat.

ASPEN – Maintain aspen cover type by regenerating the stand using a coppice system. Favor winter harvesting for more abundant regeneration as well as reduced soil impact. Rotation age is generally 50 years. Achieve age-class diversity by flexing rotation age within the property.

RED MAPLE - Lower quality sites will be rotated and regenerated via coppice with fiber as the product objective. Higher quality sites will be managed with a sawlog objective by either shelterwood or group selection regeneration techniques. The group selection technique can be used to maintain patches of red maple and other semi-tolerant species if management sees the site fit enough to support the type.

All STANDS –

- Utilize BMP's for Water Quality to protect streams and wetlands when conducting timber sales.
- Utilize BMP's for Invasive Species to help limit the introduction and spread of invasive species when conducting timber sales
- Retain reserve/legacy/green tree retention trees as groups or individuals throughout the property within harvested stands



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Prescriptions shown for the property below reflect planning through WisFIRS. These prescriptions may not all be completed, depending on if the stand develops slower than expected or if the maximum allowable cut for the Jackson and Monroe County on other State Lands is already exceeded.

Stockwell (Halls) Creek:

- 2016: Comp. 210 Stands 9,10,31 – 39 acres of red pine thinning and 20 acres of oak regeneration harvest.
- 2017: Comp. 202 Stand 20 – 7 acres of red maple regeneration harvest.
Comp. 203 Stand 15,16,20,25 – 30 acres of red pine thinning and 3 acres of red maple regeneration harvest.
Comp. 204 Stands 16,18,22 – 9 acres of red pine thinning
- 2018: Comp. 205 Stands 24,28 – 1 acre of misc. coniferous clearcut, 2 acres of red pine thinning.
Comp. 211 Stand 28 – 5 acres of red pine thinning.
Comp. 212 Stands 4,14,21,29 – 15 acres of red pine thinning, 14 acres of red maple regeneration harvest, and 15 acres of oak regeneration harvest.
- 2022: Comp. 208 Stand 5 – 7 acres of oak regeneration harvest.
Comp. 209 Stand 13 – 5 acres of oak regeneration harvest.
- 2023: Comp. 209 Stand 5 – 11 acres of aspen coppice harvest.
Comp. 212 Stand 7 – 15 acres of aspen coppice harvest.
- 2027: Comp. 204 Stand 27 – 15 acres of red maple regeneration harvest.

Approvals:

Armand D Barty 6/20/16
Regional Ecologist Date

Clint Hill 6/13/16
Forester Date

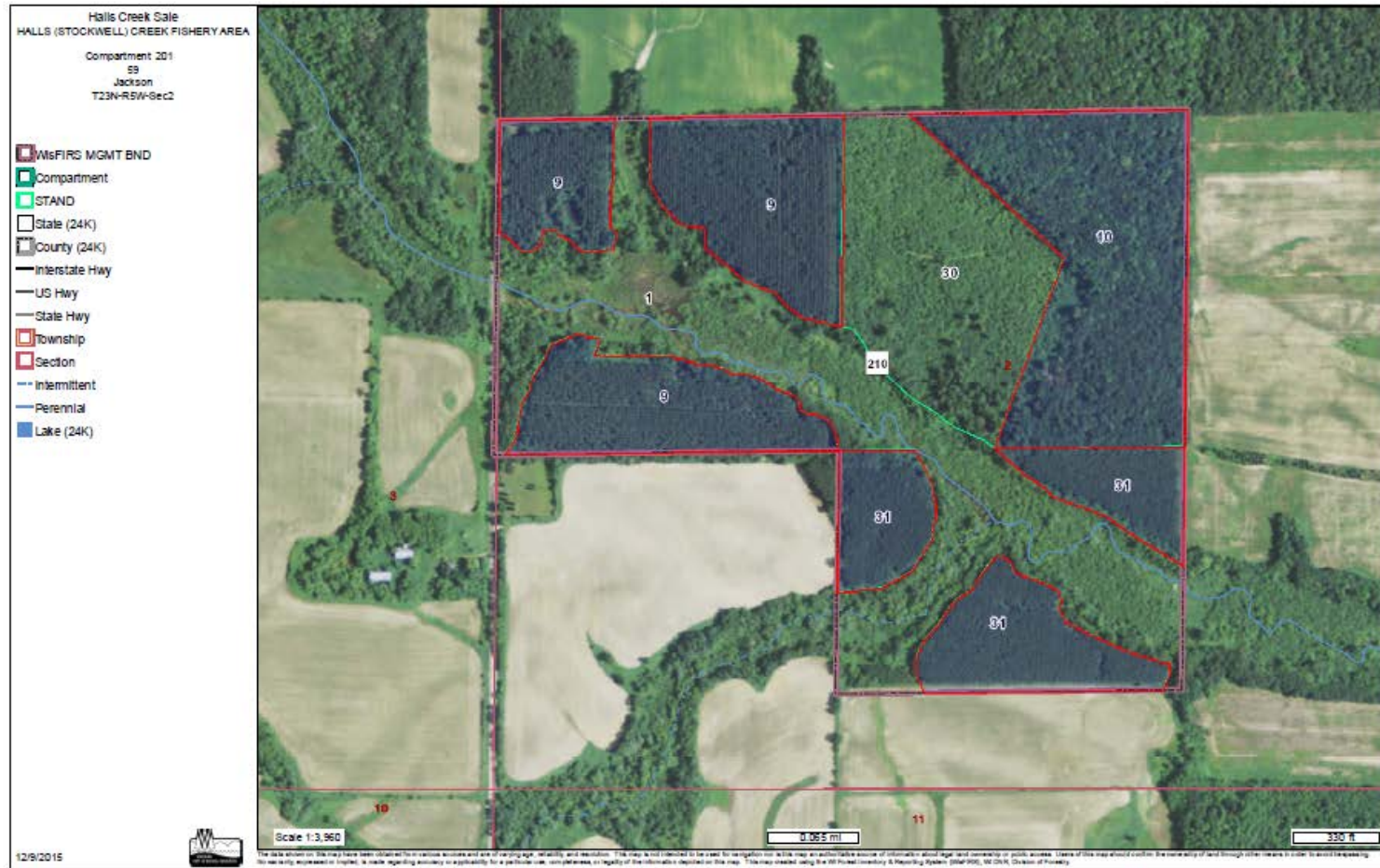
David C. Heitler 6/13/2016
Property Manager Date

Robert Hight 6-21-16
Area/Team Supervisor Date



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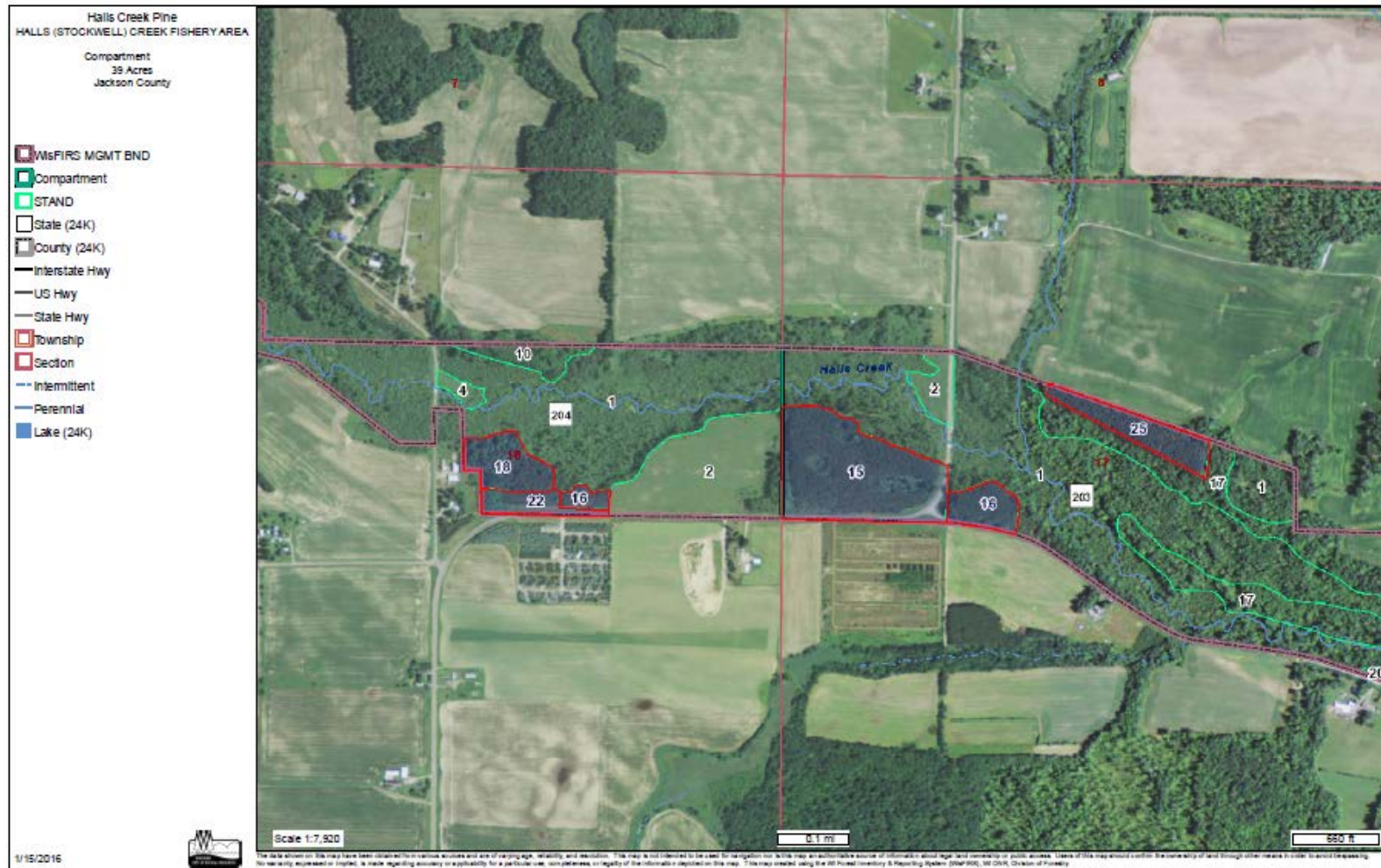
Halls Creek 2016 Timber Sale Map – 59 acres
Red pine thinning, oak regeneration harvest





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Halls Creek 2017 Proposed Timber Sale Map – 39 Acres Red pine thinning





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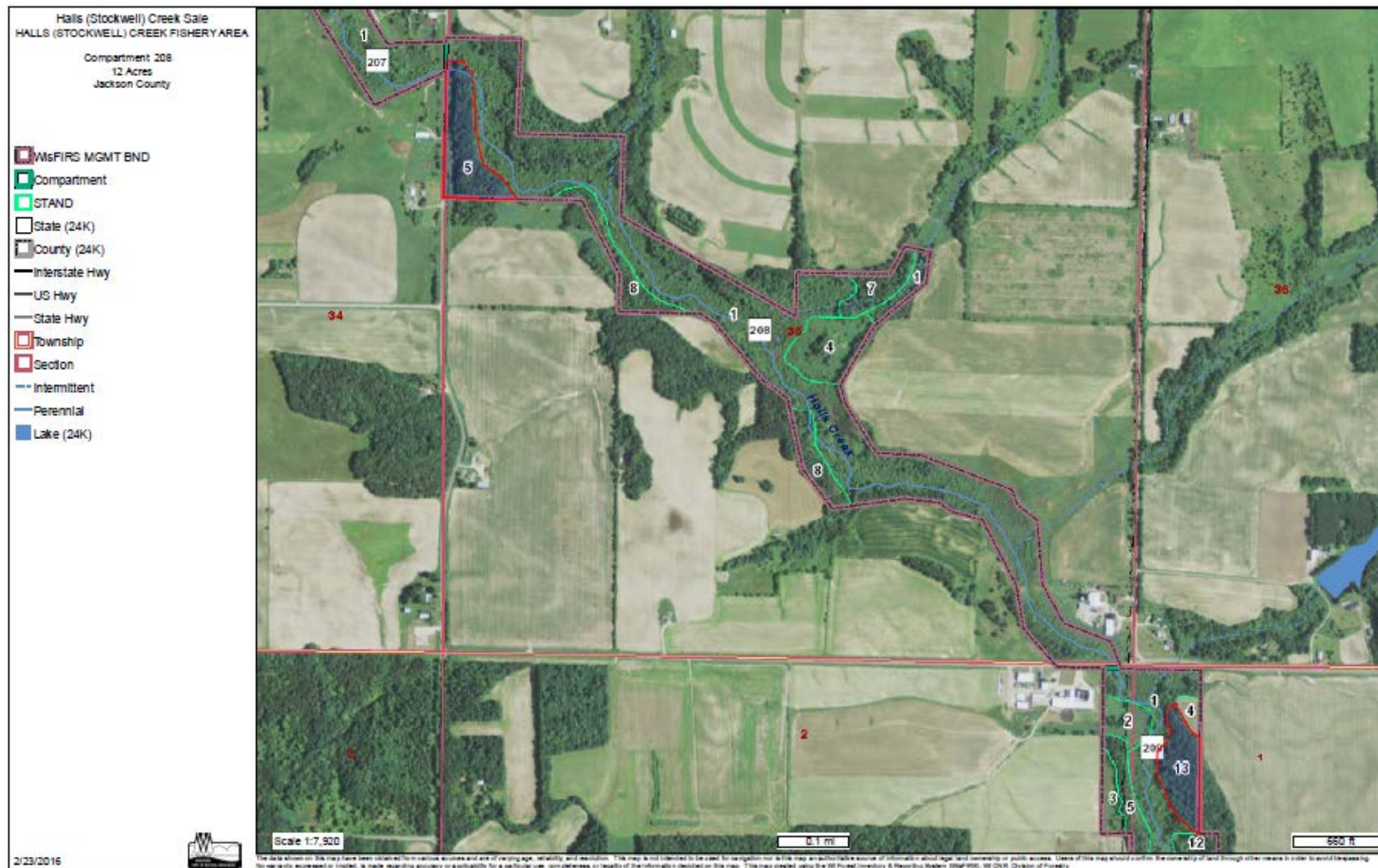
Halls Creek 2018 Proposed Timber Sale Map – 30 Acres
Oak and red maple regeneration harvest, red pine thinning





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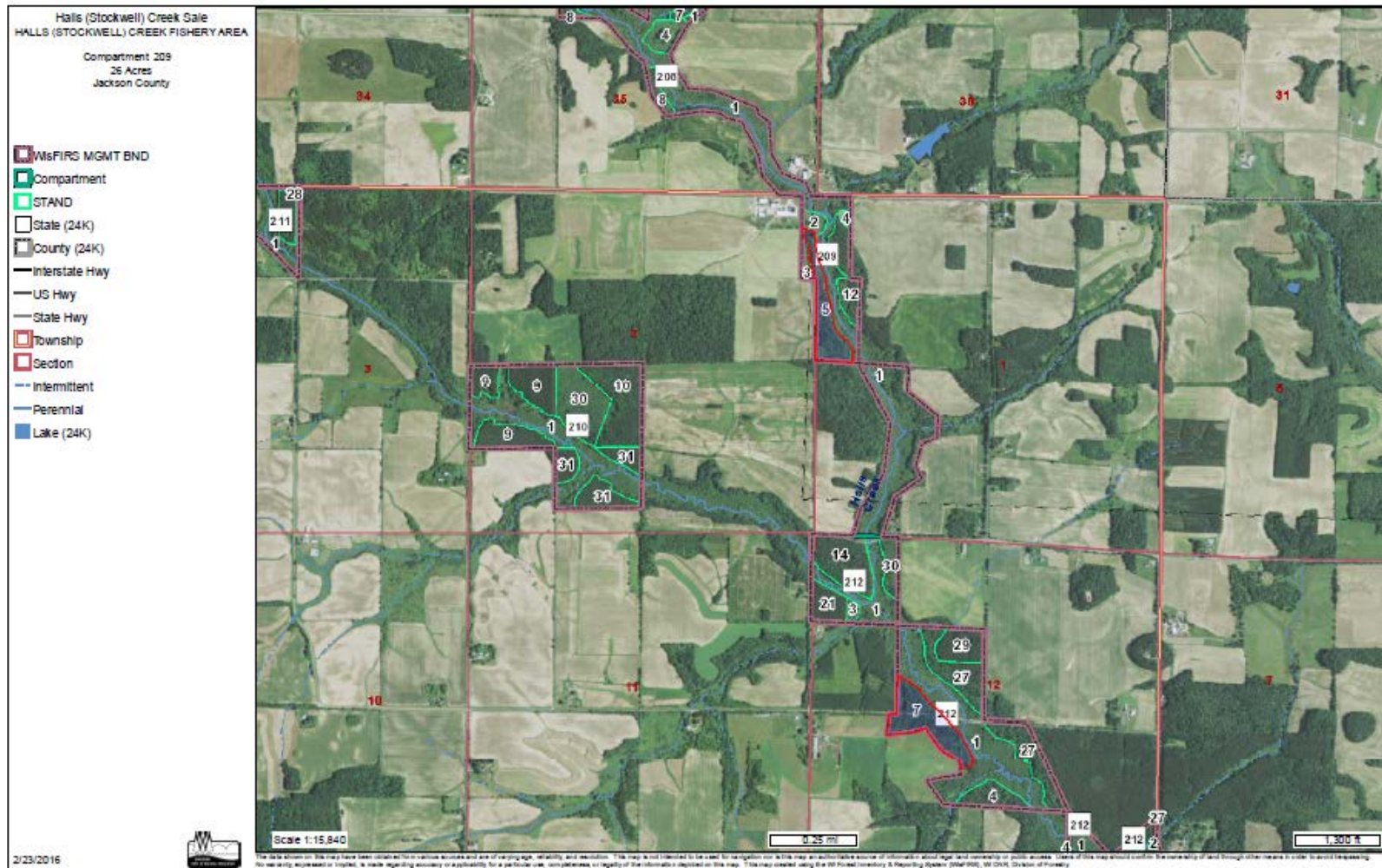
Halls Creek 2022 Proposed Timber Sale Map – 12 acres
Oak regeneration harvest





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Halls Creek 2023 Proposed Timber Sale Map – 26 acres
Aspen coppice harvest





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Halls Creek 2028 Proposed Timber Sale Map - 15 acre Red maple regeneration harvest

