

Memorandum

Subject: FY2007 AOP Modification; Gold Coast Timber Sale
To: Wayne Auble; Assistant District Forester
From: Tim Lieske; Unit Forester
Date: October 8, 2007

Based on the proximity and common haul route of the alternate FY07 timber sales, Holly Gold, Joyce Creek and Coast Bill, I am recommending a major modification to the AOP to combine portions of these sales. The Timber Contracts Unit recommends that the best silvicultural and financial decision is to combine the three alternate sales into one sale, named Gold Coast. The Gold Coast sale will combine portions of the 3 alternative sales that display the worst symptoms of Swiss Needle Cast and "zombie" alder. The remaining areas will be assessed for future sales by the Planning Unit. The sales are not in a SAH and the DFC for the combined areas is 38% GEN, 37% LYR, and 25% OFS.

The recommended modifications are as follows:

- Merge areas and change prescription in Area 1 and 2 in Holly Gold sale to be one modified clearcut, resulting in Area 1 of Gold Coast.
- Merge areas and change prescriptions in Area 1, 2, and 3 in Joyce Creek sale to be two modified clearcuts, resulting in Area 2 and 3 of Gold Coast.
- Area 1 of Coast Bill will become Area 4 of Gold Coast.

The original approved AOP yielded three sales with a combined net acreage of 316 acres of the areas that will be incorporated into the proposed Gold Coast sale. Due to changes in buffer delineation, the new acreage will be 314 acres. The new sale will yield 3.4 MMBF, an increase of 0.1 MBF over the original estimates. Attached is the new proposed Gold Coast Pre-Operations report with exhibits. This modification was reviewed and accepted by ODF resource specialists and conforms to all applicable standards.

If you concur with this recommendation please sign below and forward to Ross for his signature. If you approve I will send the updated information to Salem. Thank you.

Approved: Wayne E Auble 10-16-07
Wayne Auble; Assistant District Forester Date

Ross Holloway 10-17-07
Ross Holloway; District Forester Date

Pre-Operations Report

Operation Name: Gold Coast
County: Tillamook
Management Basin: Trask

Table 1. Operation Areas, Types and Acres

Area	Type of Operation	Gross Acres	Net Acres ¹
1	MC	132	120
2	MC	126	103
3	MC	95	91
Total		353	314

¹ The net acres are based on orthophotos and GPS and exclude roads, stream buffers and reserve areas.

I. PHYSICAL DESCRIPTION OF OPERATION AREA:

Slopes have a varied aspect and range from 5% to 85%. Elevations range from 600 to 2000 feet. The major soil types are Rye and Killam.

The landforms are gentle but narrow ridgelines with steep side-slopes. The sale areas are separated by Edwards Creek, Joyce Creek, and Bill Creek. There are bands of steep slopes throughout the sale areas. The underlying rocks are predominantly igneous origin the submarine base of the Tillamook Volcanics Formation. The underlying rocks of the northeast tip of the sale area are sedimentary origin rocks of the Tye Formation.

II. CURRENT STAND CONDITION:

Table 2. Stand Inventory Information³

Area	Prescription	Stand ID ¹	Species	Age	DBH	BA	TPA	SDI	Net Acres ²
1	MC	350	DF	37	12	80	103	21	120
2	MC	351	DF/RA	39	16	115	81	35	103
3	MC	352	DF	37	12	131	140	48	91

¹ The stand inventory information is from field reconnaissance cruise plots taken in 2005.

² The net acres are based on orthophotos and GPS and exclude roads, and stream buffers and reserve areas. Modified clear cut acres are not contiguous and do not exceed 120 acres.

³ These numbers are based on plot data taken to this point and final numbers may differ significantly from the actual conditions. The directive for minor and major modifications will be followed for further review.

The sale areas burned in the 1933 (Tillamook), 1939 (Saddle Mountain) and 1951 (North Fork / Elkhorn) fires and were planted with Douglas-fir. These areas were pre-commercially thinned in 1989, 1990 or 1996 and fertilized in 1992.

The stands in the sale areas are classified as 100% CSC according to the district stand summary information (1999). The stands are dominated by Douglas fir, with scattered patches of alder, are single age and single story. See Table 2 for specific stand data.

The Douglas-fir is from an off-site seed source and has Swiss needle cast (SNC) symptoms resulting in slowed diameter and/or height growth. The stands are within the SNC zone and have been mapped by SNC aerial surveys. The dominant trees have 30-40% live crown ratios, with 25% live crown in the remainder of the Douglas-fir. The best conifer and hardwood trees are along streams and will be retained. Other conifers are few and very scattered.

There is scattered alder throughout the sale areas. Area 2 has the greatest concentrations of merchantable alder. Most alder that occurs is on disturbed sites or riparian areas where the brush species is also more prevalent. The alder components of these stands were aerially sprayed in the 1970's to release planted conifer, resulting in alder trees with short boles and many limbs. This "zombie" alder occupies more growing space than unsprayed alder. No other significant insect or disease problems have been discovered at this time.

The brush component in all the sale areas is comprised primarily of sword fern. Oregon grape is heavy on ridge tops. Other species such as vine maple, salmonberry and bracken fern occur sporadically.

There are some large snags in various states of decay and/or some hard snags created from animal damage. Down wood consists of scattered large old logs (36"+) in Class 3 and 4 stages of decay and some windthrow in decay classes 1 and 2 and slash from PCT activity.

III. DESIRED STAND CONDITION and VISION:

Table 3. Stand Structure Information

Area	Stand ID	Current	Post Harvest	Desired Future	Net Acres
1	350	CSC	REG	GEN/LYR	2/118
2	351	CSC	REG	GEN/OFS	26/77
3	352	CSC	REG	GEN	91

See Section IV: Proposed Management Prescription for more information on Green Tree, Down Wood, and Snag Strategies during operation. Also refer to Landscape Design in the Summary document for more information on strategies to move the district toward Desired Future Condition goals.

The prescriptions described below are based on the current stand condition such as overall tree and stand growth, species mix, stand density, and stand health. The goal at this time is to remove off-site Douglas-fir and zombie alder and

replant the stand to a mixed species stand historically found in the coast range. By planting a mixture of conifers a variety of goals will be available in the future. Hardwoods will be retained along riparian areas. Other conifer species are few and very scattered and will be retained. Alder is expected to become established naturally after conifer planting, so future managers can choose the best trees for continued growth.

These prescriptions will combine with the adjacent stands to create a mosaic of openings over the landscape through gaps, variable density and mixed species. Unmanaged hardwood and conifer mixes will be left in headwalls, and/or in riparian buffers as well as scattered in the unit.

As the future stand becomes established the residual trees from this entry will add to complexity of sizes, species and densities. These trees can be treated in the future to create snags and down wood larger than is possible now. The largest and healthiest trees will be chosen to be left.

IV. PROPOSED MANAGEMENT PRESCRIPTION AND ANTICIPATED PATHWAY:

See table 2 for prescription targets

In all areas, merchantable Douglas-fir and alder will be removed. A diameter limit will be used to select the largest Douglas-fir trees to be left. Current estimates are 3-9 trees per acre in units, with 9-15 overall. The density and size of leave trees will be determined after a more comprehensive cruise is completed. Non-merchantable alder will be reserved scattered throughout the harvest areas. Other tree species will be reserved.

Green Tree, Down Wood and Snag Strategies

See also Section III: Desired Future Condition for long term strategies

A variety of methods will be used to achieve green tree retention requirements. Leave trees function as future source of snags and down wood recruitment across the landscape. Green trees will be left on precipitous slopes and headwalls. Small non-merchantable hardwood and conifer will also be retained where possible. Stream buffers adjacent to small perennials and the outer Riparian Management Area (RMA) of fish bearing creeks will also contribute additional green trees. Many of these areas will be posted so they are outside of the timber sale boundary.

Existing down wood will be left in the sale areas. Down wood recruitment is expected through mortality and windthrow of residual or leave trees, felled snags and/or tops left during harvest (where available). Tops resulting from ground yarding will be left dispersed throughout the unit.

Existing snags not determined to be a safety hazard will be retained and any felled snags will be left for down wood. Creation of snags is expected during harvest activities (rub trees, lift trees, or tail trees) and over time by natural processes.

A treatment of girdling and felling trees around the perimeter of Area 3 after harvest is being evaluated for effectiveness and feasibility. Current estimates propose approximately 100 trees treated. This treatment should result in 50 fresh snags and approximately 5600 board feet of Class 1 downed wood. The majority of the treatment would be along riparian areas.

V. ESTIMATED TIMBER AND REVENUE INFORMATION:

Table 4. Timber and Revenue

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
100%	%		X
Planned Quarter:			

	Conifer	Hardwood	Total
Net Volume (MBF)	2920	500	3420
Stumpage Value (\$/MBF)	\$225	\$250	
Estimated Gross Value	\$657,000	\$125,000	\$782,000
		Project Costs:	\$133,694
		Estimated Net Value:	\$648,306

VI. HARVESTING AND ACCESS CONSIDERATIONS:

The sale areas are accessed via South Fork Trask River, Edwards Creek Road, Gold Peak Road, Joyce Creek Road, South Coast Range Road and unnamed spurs. These are currently all weather crushed rock and/or pit run roads. See maps for specific road locations and conditions.

Approximately 0.6 miles of abandoned road may be improved which includes grading, rocking, widening, sidecast pullback and adding new culverts. This work will bring all roads up to standards described in *the Forest Roads Manual*.

Approximately 1.7 miles total of roads will be constructed in order to realign an existing road and to provide access to cable yarding areas. Following harvest, roads within the sale areas will be reviewed for closure. Ground yarding roads will be closed and water-barred following harvest. See summary document for more information on this topic.

Other project work that may be included with this sale are stream enhancement projects, road vacation and culvert removal.

The operation will be 80% cable yarding and 20% ground yarding. No helicopter yarding is planned for this sale. A license agreement from the BLM is required for Area 2. An easement from Green Diamond Resource Company is required for Area 3.

Table 5. Transportation Planning Summary (Miles)⁴

Activity	Mainline	Collector	Rocked Spur ¹	Dirt Spur ¹
Construct	0	0	1.7	0
Improve	0	0	0.6	0
Maintain ²	4.5	3.5	3.25	0
Close/Block ³	0	0	0	0
Vacate ³	0	0	0	1.1

¹ Additional roads may be built by the operator at the time of harvest and will need to be approved by the State through the Operations Plan before construction. These will be short dead end spurs and closed or blocked after harvest

² All roads accessing the sale area will be maintained during the life of the timber sale contract. Maintenance miles in the table are those roads not being constructed or improved.

³ Roads not closed/blocked or vacated at the end of the sale will be reviewed for closure after reforestation is established.

⁴ The numbers in this table reflect planned Project Work associated with the sale.

VII. AQUATIC RESOURCES AND WATER QUALITY:

A watershed analysis has been completed for the Trask basin. Actions are being planned as a result of the analysis recommendations. South Fork Trask River, Edwards Creek, Bill Creek and Joyce Creek are large and medium Type F streams that are within or adjacent to the sale areas and haul route. There are additional unnamed small perennial and seasonal Type N streams within the sale areas. Oregon Department of Fish and Wildlife (ODFW) has completed stream surveys to verify fish use.

All streams will be protected appropriately during sale layout based on flow, topography, and terrain according to *Forest Management Plan* Riparian Strategies. The riparian areas will be reviewed during sale layout for current stand conditions and/or operational constraints for implementing FMP strategies.

ODFW fish biologist will work with ODF to identify possible stream enhancement project areas to incorporate wood placement into the stream with harvest activities.

In order to protect water quality during active operations, a variety of methods will be used to prevent sediment from entering live streams. These methods include (but are not limited to) maintaining culverts and other road drainage structures, using sediment control devices in road ditches when necessary, and monitoring

logging and hauling operations. Work in live streams will be conducted between July 1 and September 15. Operations outside of this period will be reviewed with ODFW.

VIII. T&E SPECIES CONSIDERATIONS:

The sale area has been reviewed with the ODF Northwest Oregon Area Biologist. Surveys for marbled murrelets are not required for Gold Coast, due to the absence of potentially suitable habitat.

Spotted owl surveys are not required for Gold Coast, as the sale area is within the Tillamook Burn (see November, 2002 ODF Policy Guidance: *Northern Spotted Owl Surveying on State Forest Lands*).

T & E Fish species: See Sections VII, and IX for listed fish protection measures.

T & E Plant species: The sale areas were checked against the Oregon Natural Heritage Program (ONHP) database of known threatened or endangered listed plant locations as well as local records in the Land Management Classification System (LMCS). No listed plants were identified within or adjacent to the sale areas.

IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:

The initial assessment from the geotechnical specialists ranges from low to moderate due to inclusion of the entire sale area. The geotechnical specialist will be consulted during sale layout. Specific locations identified will be treated appropriately.

X. RECREATION RESOURCES:

The sale area is designated as Motorized in the *Tillamook State Forest Comprehensive Recreation Plan* (1993). This sale has been reviewed by the District Recreation Coordinator. Recreational use common to this area includes motorcycle riding, hunting and camping.

“Willy’s Construction T-shirt” trail transects Area 1. Portions of the trail will be improved for logging access. This is a valuable recreation resource and will be reestablished upon completion of the operation. There are other lightly used user created motorcycle trails in the sale areas that will be evaluated during sale layout to determine if trails need to be preserved and if so what resource protection may be appropriate. The public will be advised when trails are closed due to harvest activity. The District Recreation Coordinator will be consulted during sale layout and administration. A dispersed campsite at the junction of Bill Creek will be protected to allow camping during harvesting.

XI. CULTURAL RESOURCES:

The *Tillamook State Cultural Assessment* does not list any cultural sites within or adjacent to the proposed sale boundary.

XII. SCENIC RESOURCES:

The majority of sale areas have a visual classification of Level 3, low sensitivity. Portions of Area 2 have a Deed restriction that could potentially classify the area along the South Fork Trask River as Level 2, moderate sensitivity. The sale may be reviewed by the Public Use Coordinator during sale layout. No scenic impact is expected.

XIII. OTHER RESOURCE CONSIDERATIONS:

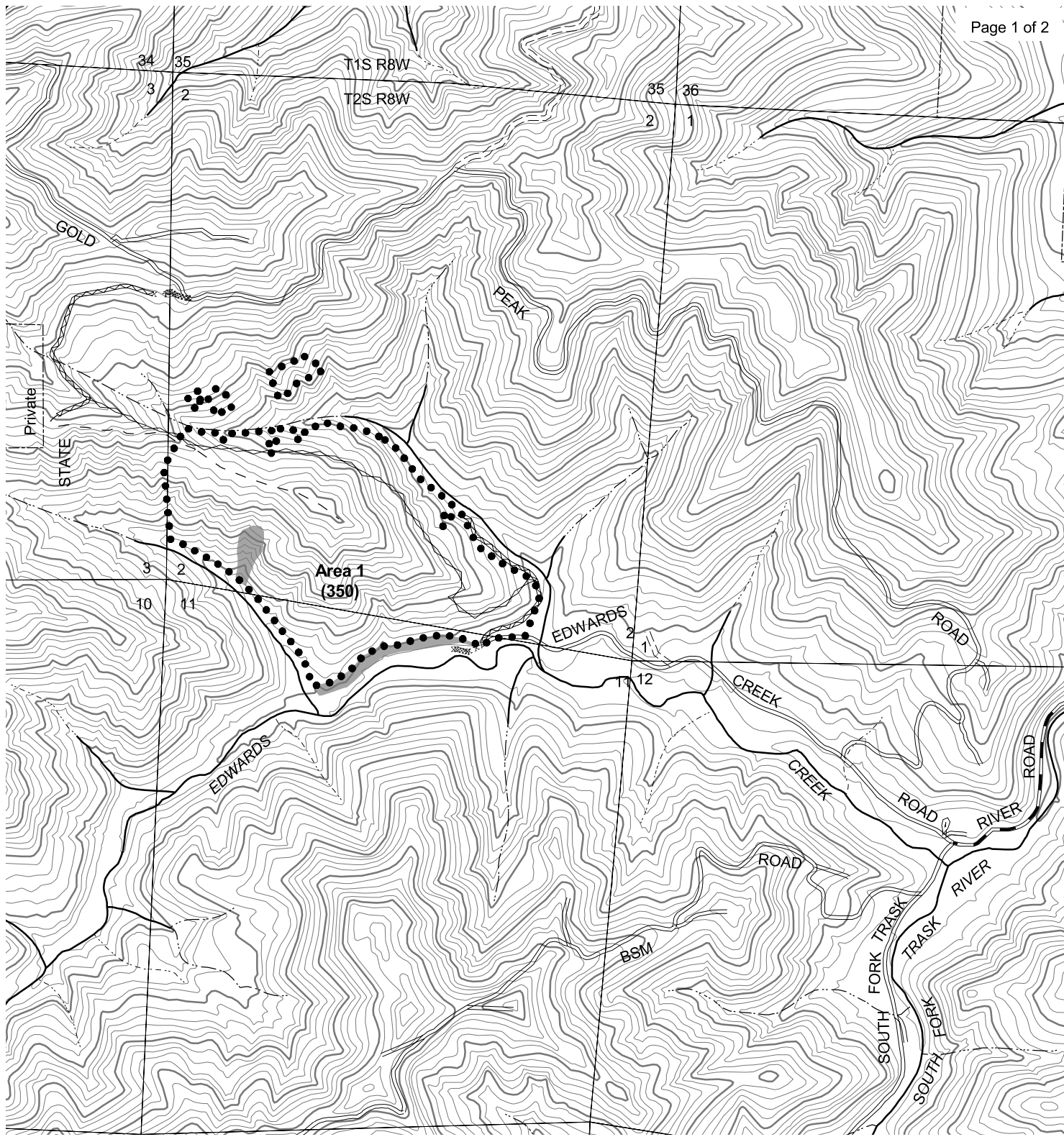
A deed restriction is in place along the South Fork Trask River, referred to as County Resolution Lands (Fund 54). See Section XII for more information.

Green Diamond Resource Company is the adjacent landowner to the west of Area 3. Property lines will need to be confirmed and all property or corner markers protected from damage.

XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:

Areas 1, 2 and 3 contain Focused Stewardship, Aquatic and Riparian Habitat, Deeds, and Recreation. See Section VII, Aquatic and Resources and Water Quality, Section XII, Scenic Resources for the management guidelines to be utilized.

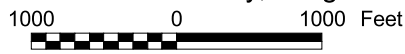
Boundary lines depicted on Attachment C are approximate; exact locations and site specific management activities will be determined during the sale preparation process.



Contour Interval 40'

- +--- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream *
- Perennial Type-N stream *
- ==== Unsurfaced road
- ===== Surfaced road
- State/Federal highway
- ==== Legacy road
- xxxxx Blocked road
- - - Road construction
- County road
- T T Transmission line

GOLD COAST
-- Topography --
2008 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 2, 11, 13, 14,
 23, 24 and 25
 T2S, R8W, W. M.
 Tillamook County, Oregon

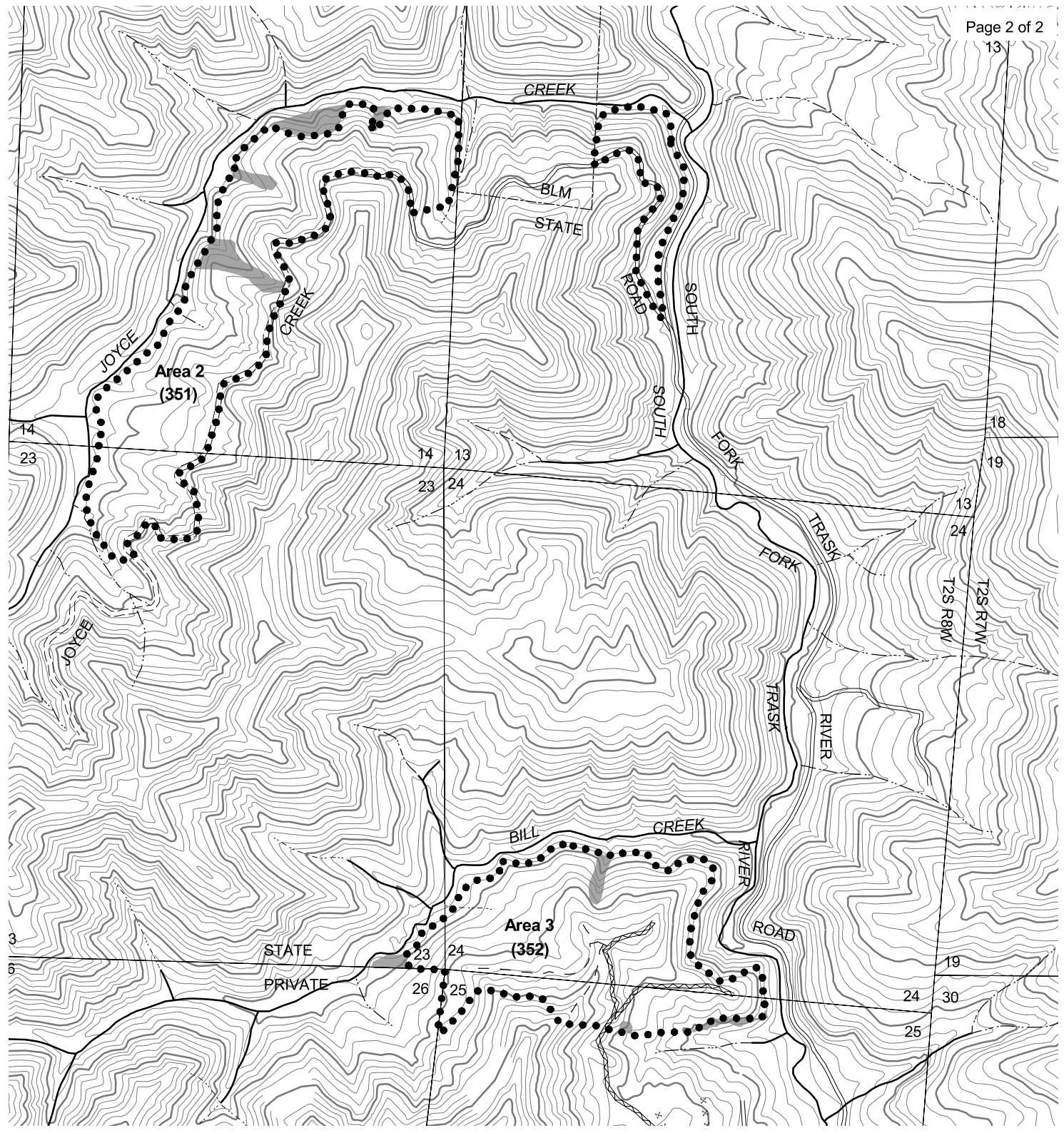


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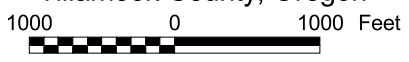
Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified Clearcut

* Streams of unknown fish presence are not shown but will be surveyed prior to the sale



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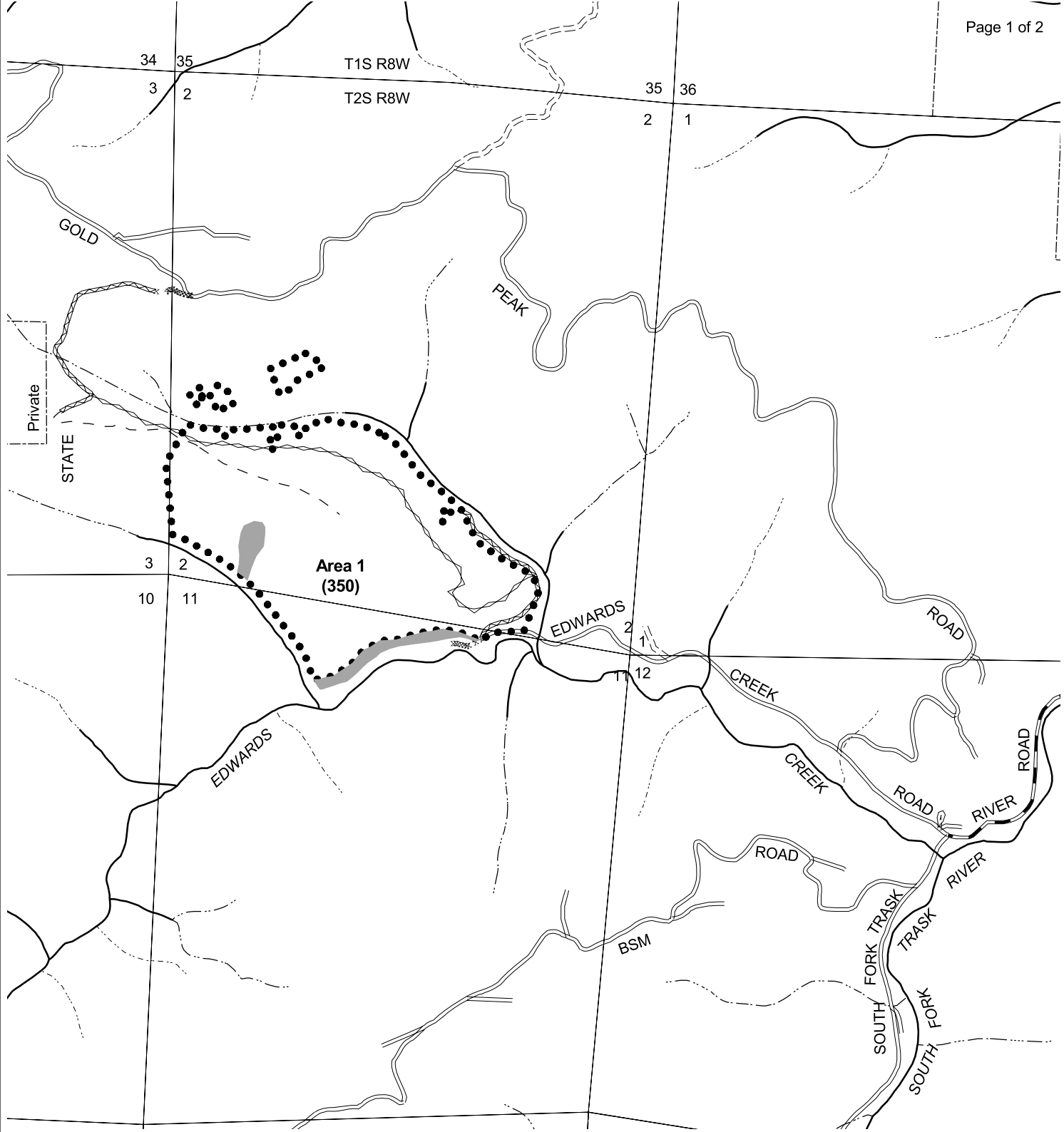
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- Buffer
- Non-required thinning
- Area boundary
- Sale boundary
- Ownership boundary
- Perennial Type-F stream *
- Perennial Type-N stream *
- Unsurfaced road
- Surfaced road
- State/Federal highway
- Legacy road
- Blocked road
- Road construction
- County road
- Transmission line

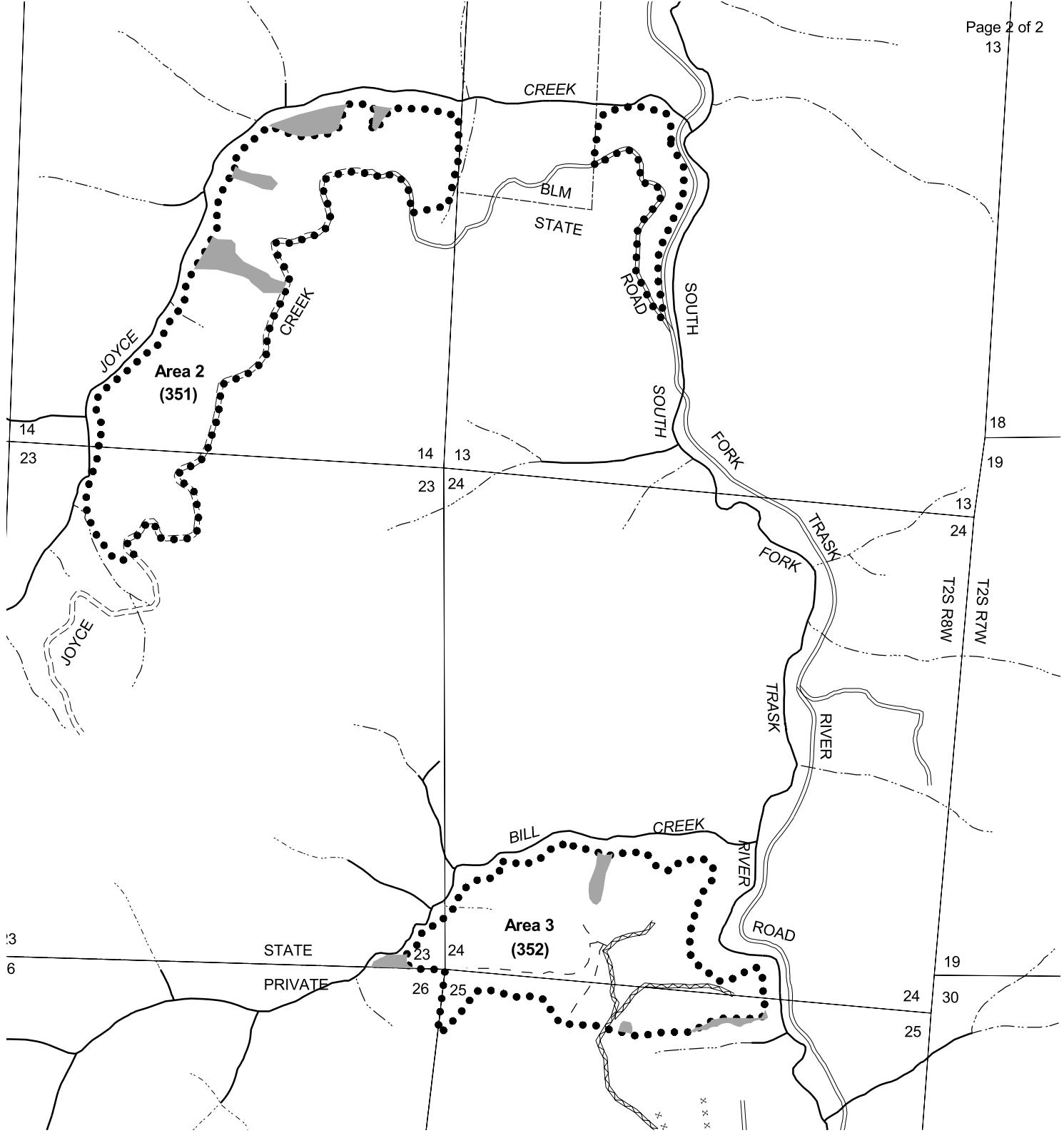
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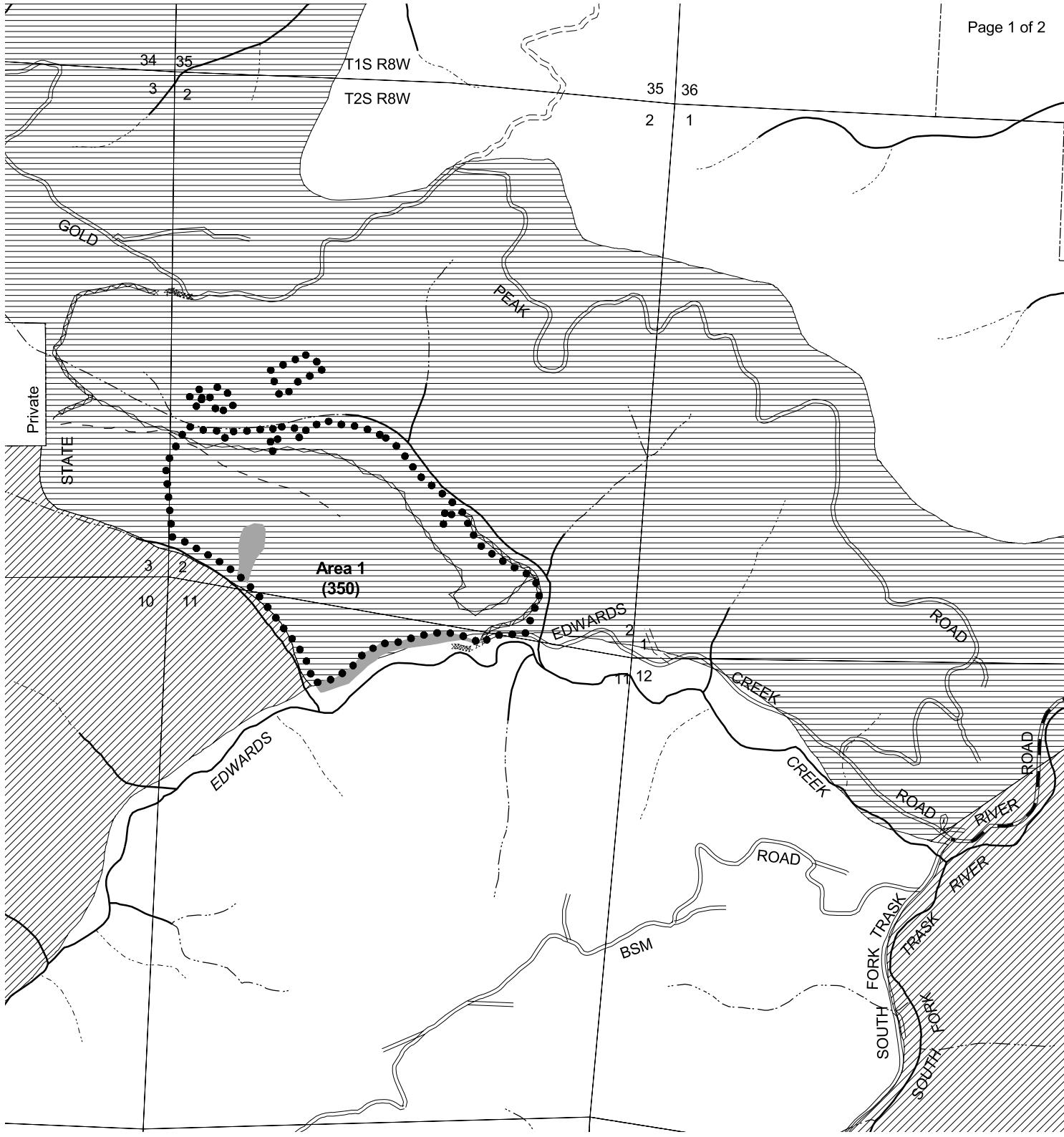
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- Desired future condition
- Layered
 - Older forest
 - Area boundary
 - Sale boundary
 - Ownership boundary
 - Perennial Type-F stream *
 - Perennial Type-N stream *
 - Unsurfaced road
 - Surfaced road
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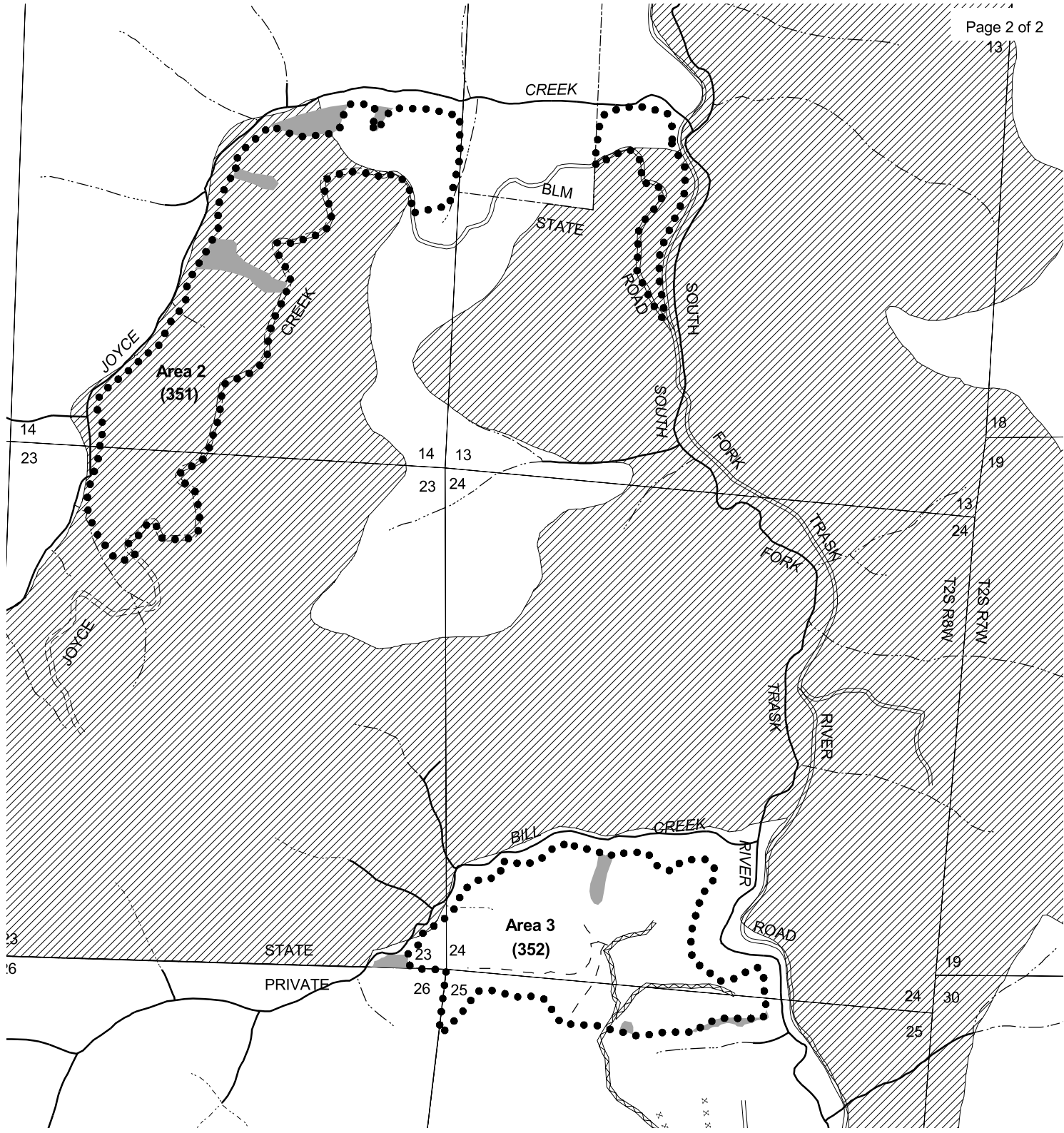
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-- Current and Future Condition --
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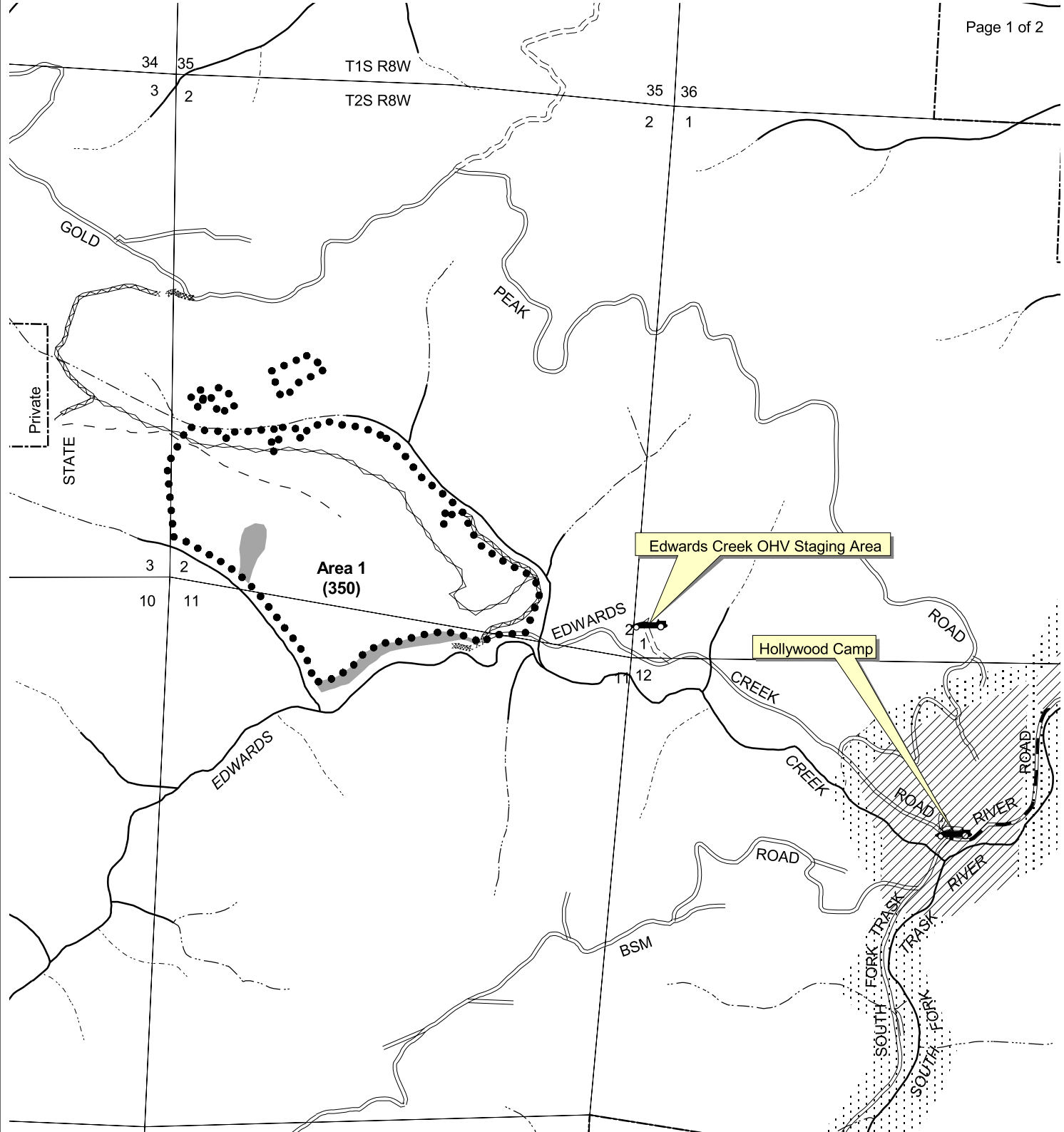
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|--------------------------|---------------------------------|
| Desired future condition | ---+--- Area boundary |
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| | — Perennial Type-F stream * |
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| | === Unsurfaced road |
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- Campground
- Day Use Site
- OHV Staging Area
- Trail Head
- Boat Launch
- Interpretive or Administrative Site
- Stewardship
- Focused
- Special
- OHV trail
- Non-motorized trail
- Area boundary
- Sale boundary
- Ownership boundary
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GOLD COAST

--Key Resources/Recreation --

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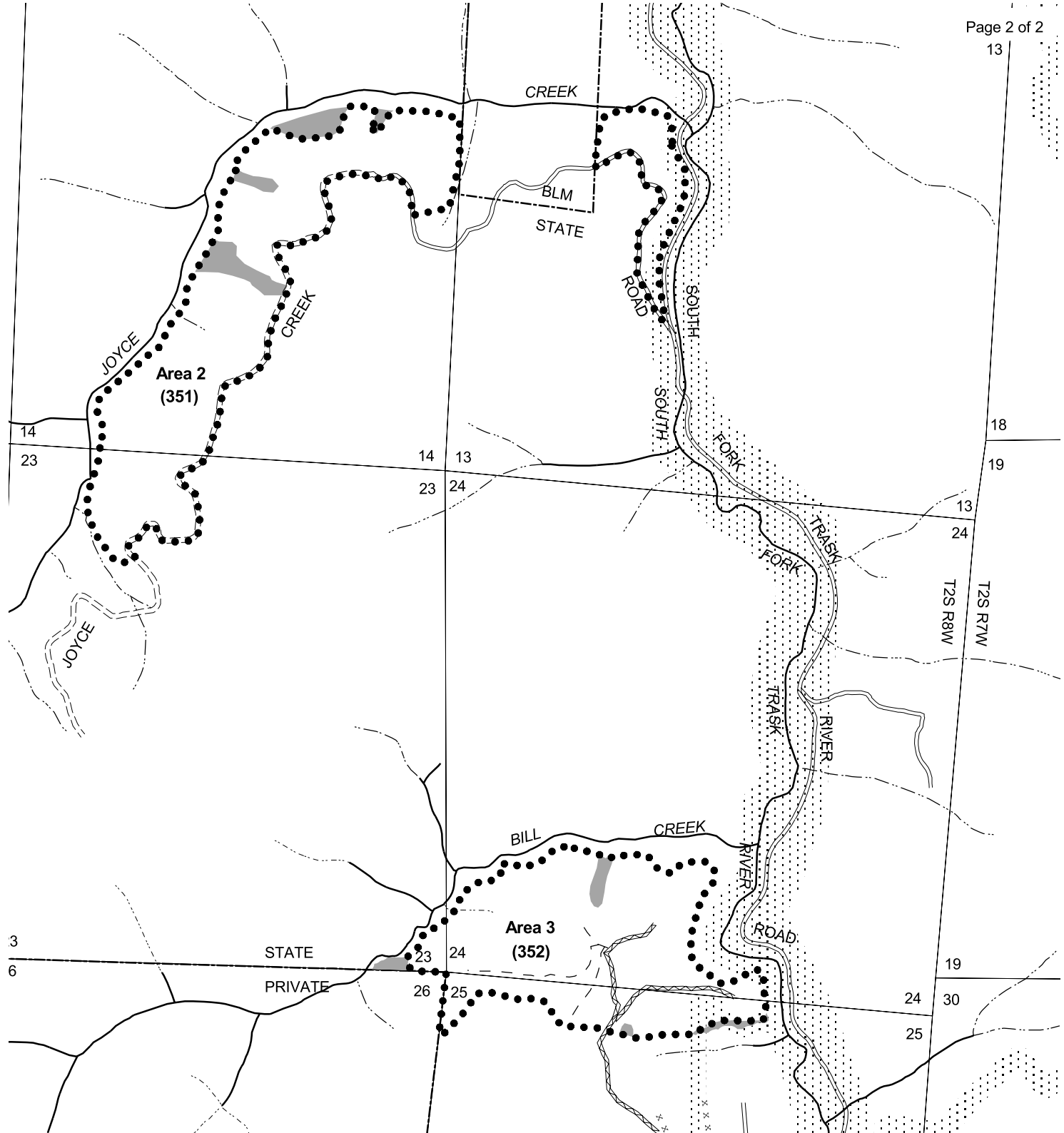
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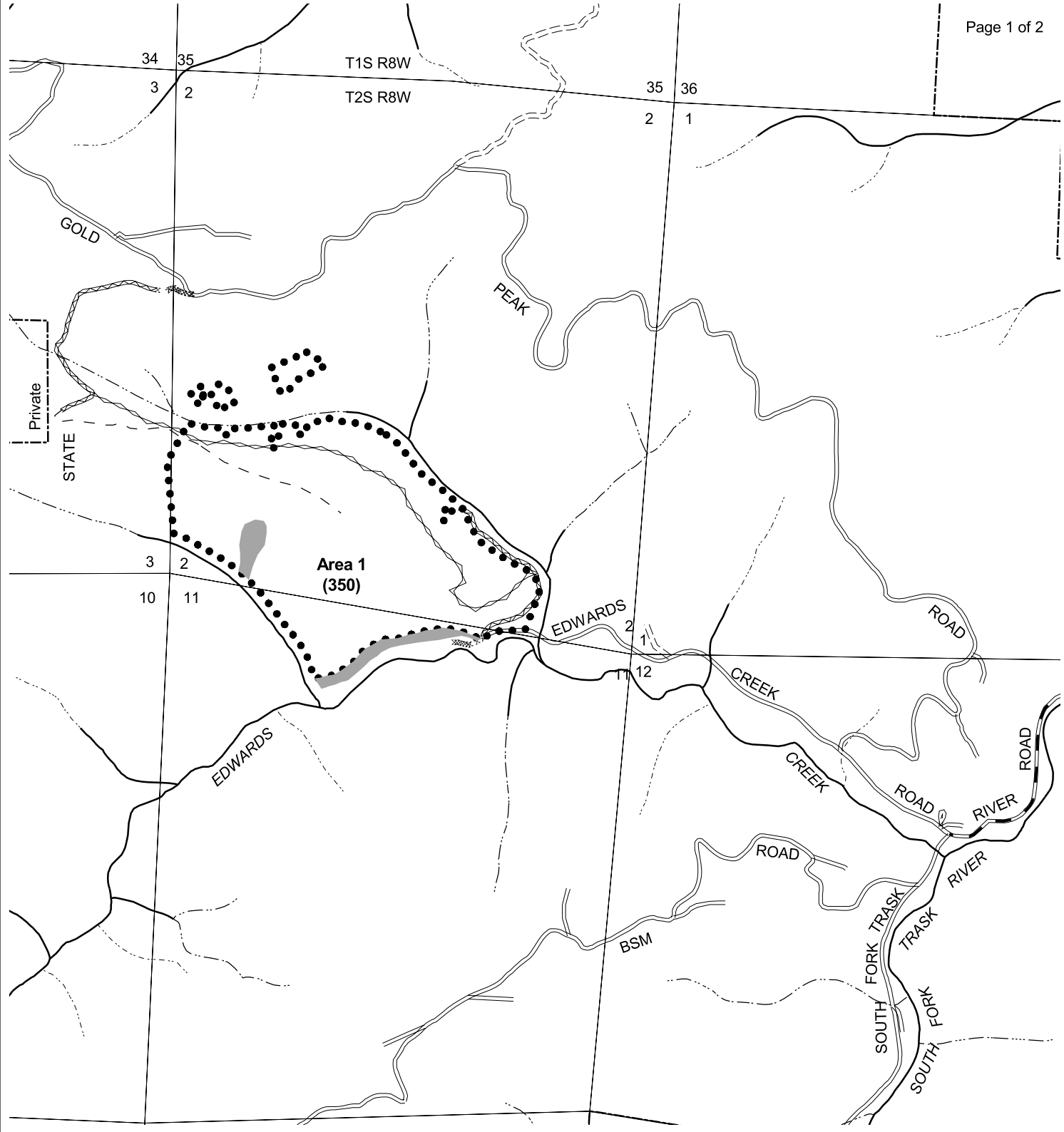
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| | | | Ownership boundary |
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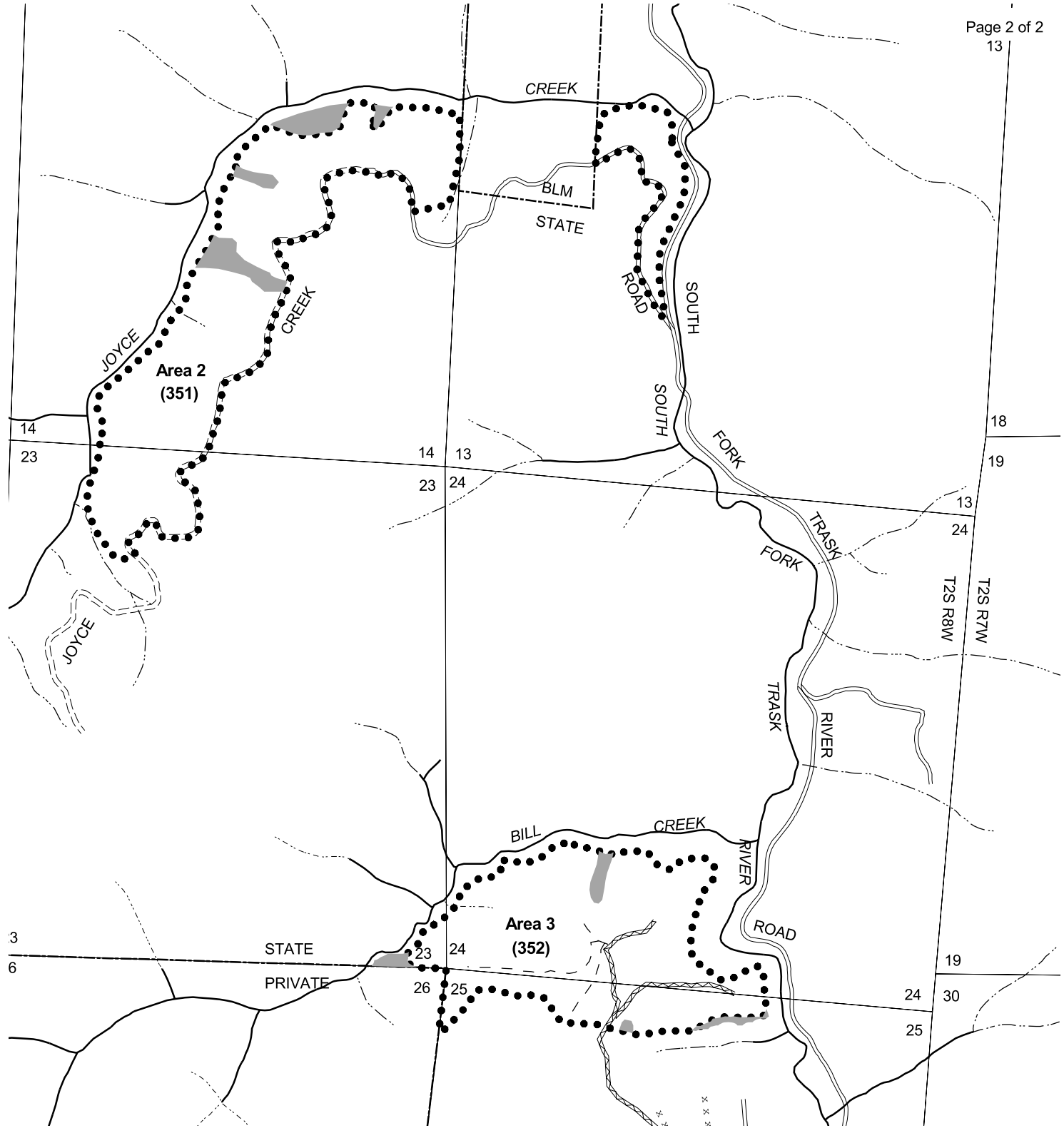
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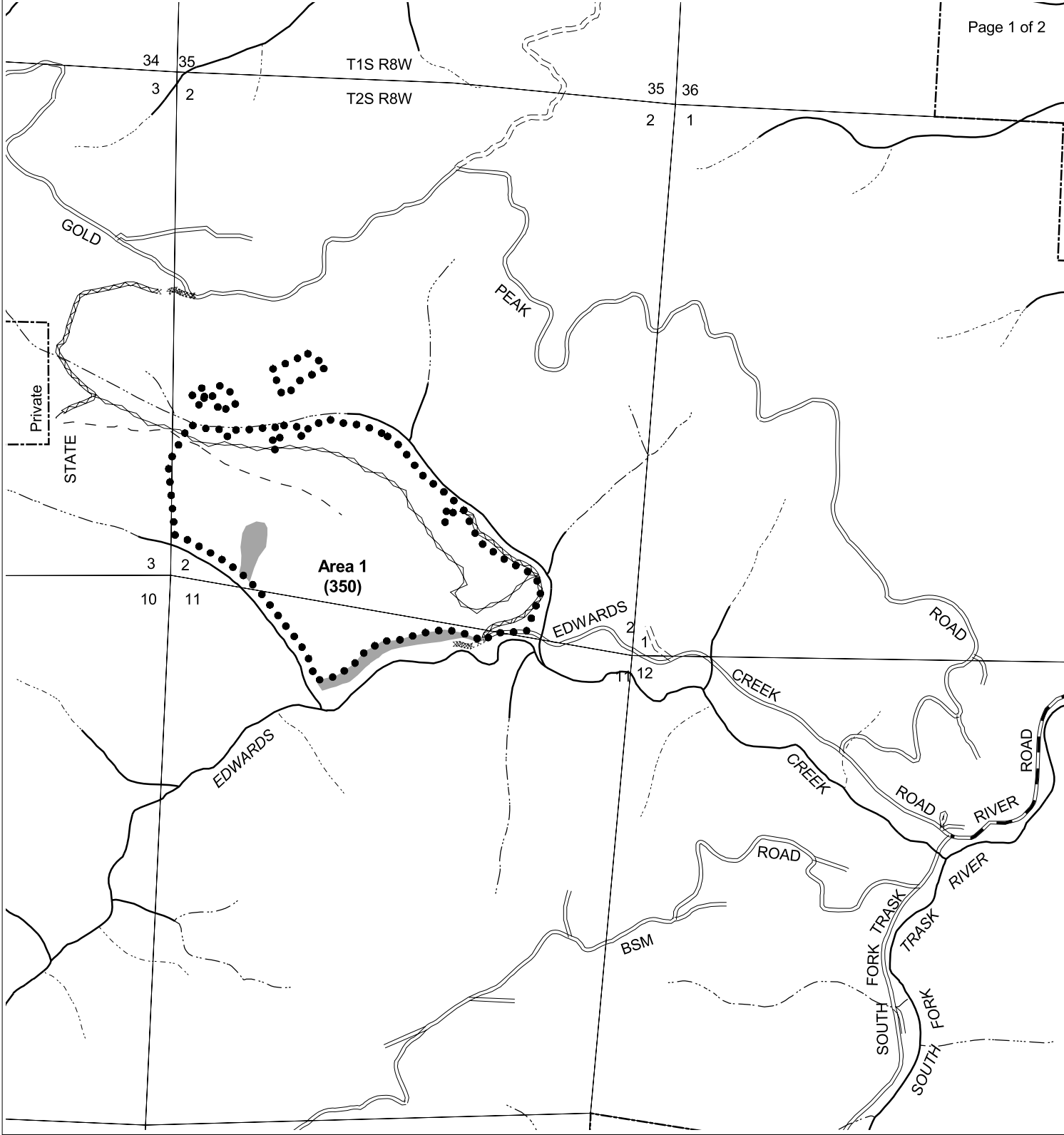


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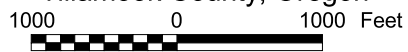
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- | | | |
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| Stewardship | ----- | Area boundary |
| Focused | ●●●● | Sale boundary |
| Special | ----- | Ownership boundary |
| | ———— | Perennial Type-F stream * |
| | ----- | Perennial Type-N stream * |
| | ==== | Unsurfaced road |
| | ===== | Surfaced road |
| | ———— | State/Federal highway |
| | ----- | Legacy road |
| | xxxxx | Blocked road |
| | - - - - | Road construction |
| | ———— | County road |
| | T T | Transmission line |

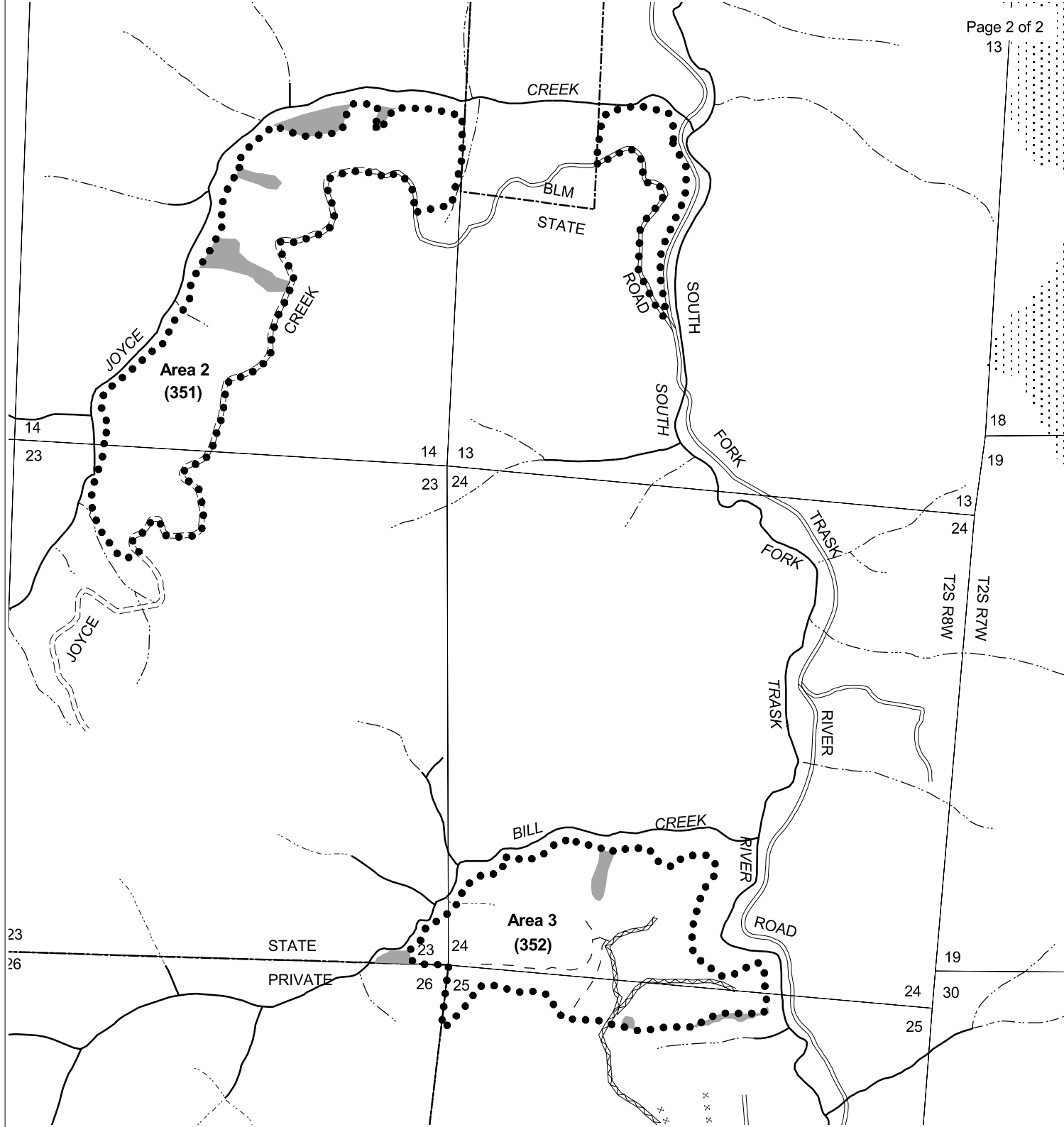
GOLD COAST
-- Key Resources/Wildlife Habitat --
2008 SALE PLAN
TILLAMOOK DISTRICT
 Portions of Sections 2, 11, 13, 14,
 23, 24 and 25
 T2S, R8W, W. M.
 Tillamook County, Oregon



Tillamook District GIS
 August 2007
 This product is for informational use and
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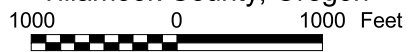
Area	Type of Operation
1	Modified Clearcut
2	Modified Clearcut
3	Modified Clearcut

* Streams of unknown fish presence are not shown but will be surveyed prior to the sale



- | | |
|-------------|---------------------------------|
| Stewardship | ----- Area boundary |
| Focused | ●●●● Sale boundary |
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