

ASAY BENCH ALLOTMENT MANAGEMENT PLAN



Forest Service

Dixie National Forest
Cedar City Ranger District

1789 N. Wedgewood Lane
Cedar City, UT 84720-7769
435-865-3200



Allotment Management Plan

For

Asay Bench C&H Allotment

Cedar City Ranger District – Dixie National Forest – Region 4

Management Plan Prepared by: Brian Monroe /S/ Date: 4/25/2011
Rangeland Management Specialist

Reviewed By: Orval Palmer /S/ Date: 4/25/2011
Permittee

Reviewed By: Gilbert Yardley /S/ Date: 4/25/2011
Permittee

Reviewed By: Leon Brinkerhoff /S/ Date: 4/25/2011
Permittee

Approved by: Veronica Magnuson /S/ Date: 5/5/2011
District Ranger

This Allotment Management Plan is hereby made a part of your Term Grazing Permit and is incorporated in Part 3 of that permit

**Asay Bench C&H Allotment Management Plan
Cedar City Ranger District
Dixie National Forest**

I. Introduction

A. Authority -The Federal Land Policy Management Act (FLPMA), as amended by the Public Rangelands Improvement Act (PRIA) allows for Allotment Management Plans (AMP's) to be included in grazing permits at the discretion of the Secretary of Agriculture (43 U.S.C. 1752(d), as amended by 92 Stat. 1803 (1978)). The Secretary has elected to exercise this discretion, and has delegated his authority to issue regulations in this area to the Chief of the Forest Service (36 CFR 222.1 et.seq.).

B. Definition - An Allotment Management Plan is defined in FLPMA as a document prepared in consultation with lessees or permittees applying to livestock operations on the public lands prescribing: 1) the manner in and extent to which livestock operations will be conducted in order to meet multiple use, sustained-yield economic and other needs and objectives, 2) range improvements to be installed and maintained, such other provisions relating to livestock grazing and other objectives found by the Secretary to be consistent with the provisions of the FLPMA (43 USC 1702(k), 36 CFR 222.1 (b) (2), and FSM 1023).

C. History – Originally, the Asay Bench unit was part of a large area of common use range, known as the Swains Creek Allotment.

The Tommy Creek portion was grazed by sheep until the late 1930. In 1939, Asay Bench and Tommy Creek were fenced and made into the present Asay Bench Cattle Allotment through exchange of allotments and transfer of permits. The allotment has been exclusive cattle range since 1939.

In 1957 the Forest Service plowed and seeded 918 acres of rangeland in Tommy Creek and on Asay Bench. A division fence was also constructed dividing Asay Bench into two units and separating the reseeded area from a large area of native browse and grasses. In 1959, 740 acres of sagebrush was sprayed by airplane with 2, 4-D. The spray killed a high percent of the sagebrush, releasing the native grasses and greatly increasing the forage production of the unit.

Past Management -The allotment boundaries have been the same since the allotment was set aside for cattle range in 1939. Prior to reseeding and building division fences in 1957, the allotment was grazed as two units. Asay Bench was grazed early in the spring for approximately one month, and then the cattle were taken to Tommy Creek for approximately two months and then brought back to Asay Bench for approximately one month before leaving the Forest. With the completion of the division fence on Asay Bench, a deferred rotation system of grazing was established.

D. Current Management – The Asay Bench C&H Allotment as depicted in map 1 (appendix) consists of 5 pastures: Asay Bench, Buck Knoll, Reeds Valley, Anderson Spring and Tippetts Valley. Three permittees are authorized to graze 266 cow/calf pairs during a season of 6/16

through 9/30. The allotment consists of approximately 15,618 acres of National Forest System lands, of which approximately 8,233 acres (53%) are suitable.

II. Goals & Objectives, Desired Resource Condition, Standards & Guidelines

A. Summary of Existing Resource Conditions

The Asay Bench Allotment has experienced an increase in conifer as well as a decline in Aspen which is further agitated by little to no Aspen Regeneration. West Fork Asay Creek travels through highly erosive soils. The Asay Bench has been subject to flash flooding these events have resulted with incision marks off of the bench and into West Fork Asay Creek. Reeds Valley, Anderson Spring and Tippetts Valley are all plagued with conifer encroachment that has choked out Aspen stands and forage. A bench above Reeds Valley Creek has uncharacteristic ground cover and vegetation composition. There has been no explanation for the peculiar condition. We do know there was a lumber mill within this valley as well as evidence of a dam built on Reeds Valley Creek. At this time there is no evidence that livestock are leading to or intensifying this condition. Cattle are trailed across the Black Mountain Allotment moving to and from the upper pastures on the allotment. Burrows Flat and Bowers Flat areas within the Black Mountain Allotment have been beleaguered by perpetual stray cattle drifting between the upper and lower pastures of the Asay Bench Allotment.

B. Goals and Objectives (Desired Condition)

1. Achieve or maintain satisfactory range conditions on all rangelands (Dixie NF LRMP IV-37). Satisfactory range condition on a site is defined as meeting or moving toward desired condition. A downward vegetation and/or soil trend (site is moving away from desired condition) would also cause further evaluation and/or change in management direction (Dixie NF LRMP V-6).

Desired Condition

Uplands

- Maintain minimum ground cover on uplands as specified in the current Dixie National Forest Supplement to FSH 2209.21 – Rangeland Ecosystem Analysis and Management Handbook Chapter 20 – Rangeland Inventory and Analysis. (Range Vegetation Condition and Trend - measurement of ground cover and soil stability -Monitoring and Evaluation Program, Dixie NF LRMP V-6)
- Maintain the relative frequency of invasive plants at less than 10 percent on uplands not affected by fire or already infested by invasive plants. (Range Vegetation Condition and Trend - measurement of plant composition and vigor - Monitoring and Evaluation Program, Dixie NF LRMP V-6).
- Maintain a plant composition overall resource value rating of greater than “low” on all uplands not affected by fire or already infested by invasive plants. (Range Vegetation Condition and Trend - measurement of plant composition and vigor - Monitoring and Evaluation Program, Dixie NF LRMP V-6).

ASAY BENCH ALLOTMENT MANAGEMENT PLAN

- In aspen community types, maintain a mixed age class of aspen with ground cover at or above 75%.
- Improve plant diversity and revert areas that have conifer encroachment issues (pinyon, juniper, spruce and fir).

Riparian Areas

- Maintain riparian ecosystems at or above 60% of potential. Potential for late seral community types is defined by % gradient and substrate classes (Dixie NF LRMP IV-41 amended 9/95; revised 3/96).
- Maintain 50 percent or more of total streambank length in stable condition (Dixie NF LRMP IV-33). This will be interpreted as maintaining 50 percent of all riparian areas with at least a moderate bank stability rating

2. Protection of threatened, endangered and sensitive plant and animal species: Provide a season of use and utilization level that will protect population of sensitive plants and animals. Protection of plants must allow for sufficient seed production to maintain or improve current populations.

3. Control or eradicate Priority I and II noxious weed infestations as they occur on the allotment using the concepts of Integrated Pest Management.

- Continue early detection for noxious weeds to prevent establishment on the Asay Bench Allotment. Coordinate efforts with Iron, Kane and Garfield Counties by documenting new outbreaks of listed species. Currently there are no known noxious weeds within the boundary of this allotment.

C. Land and Resource Management Plan Standards and Guidelines

The Dixie National Forest Land and Resource Management Plan (Forest Plan) approved in 1986 outlines the Standards and Guidelines that will be achieved through future management activities on the Dixie National Forest. The following Standards and Guidelines will be implemented through this Allotment Management Plan:

1. Range

1. Provide forage to sustain local dependent livestock industry. (IV-36)
2. Remove livestock from allotments for the remainder of the grazing season when proper use is reached. (IV-36)
3. On rangeland in less than satisfactory condition, remove livestock when recovery of range condition cannot be accomplished by the grazing system.(IV-112)
4. Invest in cost effective grazing management and associated range improvements.
5. Invest in cost effective grazing management and rangeland productivity improvement. Where improvements include water developments. Where water right is in the name of the United States. (IV-112)
 - A. Structural improvement will not adversely affect big game movement. Reference FSM 2541.23.
6. Control noxious farm weeds in the following priority:
 - A. Musk thistles, Scotch thistle, Hoary Cress (White Top) Canada thistle.
 - B. Invasion of new plant species classified as noxious farm weeds;
 - C. Infestation in new areas;
 - D. Expansion of existing infestations of Scotch, Musk and Canada thistle, and other noxious farm weeds; and
 - E. Reduce acreage of current infestation. (IV-37)

2. Range Improvements

1. Structural range improvements should be developed to benefit both wildlife and livestock.
 - A. Structural improvements and maintenance will be in accordance with FSM 2209.22 (R-4) and 2609.11. (IV-37)
2. To facilitate the control of soil erosion within acceptance tolerance, soil survey or site specific soils data will be used to develop revegetation projects.(IV-37)

3. Recreation

1. Manage livestock grazing to enhance recreation opportunities in existing and proposed recreation sites.
 - A. Construct fences of material other than barbed mire around developed sites. (IV-59,61)
2. Exclude grazing of recreational stock and livestock in developed recreation sites.
 - A. Maintain vegetation in fair or better range condition.(IV,59)
3. Manage livestock distribution and stocking rates to be compatible with recreation use. Locate Structural improvements to meet Visual Quality Objectives. (IV-65)

III. Management Actions

A. Management System

1. Livestock Grazing System

The Asay Bench Allotment will be managed as a modified deferred rotation system. The rotation is as follows:

YEAR	1 st	2 nd	3 rd	4 th
2011/ 2013/ 2015/ 2017/ 2019	Buck Knoll	Tippets Valley	Anderson/ Reeds Valley	Asay Knoll
2012/ 2014/ 2016/ 2018/ 2020	Asay Knoll	Anderson/ Reeds Valley	Tippets Valley	Buck Knoll

The grazing rotation may be further modified depending on resource needs and conditions.

2. Utilization Standard Criteria

The following is not an all inclusive list of proper-use criteria. There may be additional criteria necessary for grazing allotments. These proper-use criteria may be added to or adjusted at any time in the Allotment Management Plant (AMP) or the Annual Operating Instructions (AOI).

Exceeding any one of these standards in a monitoring area will trigger livestock removal from the pasture or allotment.

Dixie NF - Maximum Allowable Forage Use Criteria					
I. UTILIZATION BY SERAL STAGE					
Vegetation Type	Very Early	Early	Mid	Late	Comments * SH = Stubble Height
Riparian Hydric Species	6" SH	6" SH	4" SH	4" SH	Remaining at end of growing season
Riparian Emphasis Management Areas	6" SH	6" SH			Remaining at end of growing season
Hydric Species in wet meadows not influenced by streams	6" SH	6" SH	4" SH	4" SH	Remaining at end of growing season
Non-hydric Species in Riparian Areas	2" SH	2" SH	2" SH	2" SH	Remaining at end of growing season
Upland Species	50%	50%	50%	50%	Varying in specific unit from 40-60%
Wheatgrass Seedings	60%	60%	60%	60%	Management option to exceed 60% use to maintain healthy seedings
Riparian Browse	<50%				New Leader Production
Streambanks	<20% disturbance				Sloughing, trampling, dislodged stones, animal tracks
Where it is determined through the landscape assessment process that ungulate grazing is contributing to an identified functioning-at-risk condition relative to habitat needed to support goshawk and its prey; the following utilization standards will be implemented.					
Goshawk Post-Fledgling Family Areas (PFAs)	Pond Pine/ Mixed Species	Grass/Forb	Avg 20% NTE 40%	Applies in up to 2-acre openings in 600-acre areas	
Goshawk Post-Fledgling Family Areas (PFAs)	Pond Pine/ Mixed Species	Shrub	Avg 40% NTE 50%	Applies in up to 2-acre openings in 600-acre areas	
Goshawk Post-Fledgling Family Areas (PFAs)	Spruce-Fir	Grass/Forb	Avg 20% NTE 40%	Applies in up to 1-acre openings in 600-acre areas	
Goshawk Post-Fledgling Family Areas (PFAs)	Spruce-Fir	Shrub	Avg 40% NTE 50%	Applies in up to 1-acre openings in 600-acre areas	

ASAY BENCH ALLOTMENT MANAGEMENT PLAN

Goshawk Foraging Areas	Pond Pine/ Mixed Species	Grass/Forb	Avg 20% NTE 40%	Applies in up to 4-acre openings in 6000-acre areas
Goshawk Foraging Areas	Pond Pine/ Mixed Species	Shrub	Avg 40% NTE 50%	Applies in up to 4-acre openings in 6000-acre areas
Goshawk Foraging Areas	Spruce-Fir	Grass/Forb	Avg 20% NTE 40%	Applies in up to 1-acre openings in 6000-acre areas
Goshawk Foraging Areas	Spruce-Fir	Shrub	Avg 40% NTE 50%	Applies in up to 1-acre openings in 6000-acre areas

IV. Monitoring and Evaluation

V. Effectiveness Monitoring

The following monitoring program is proposed for the Asay Bench Allotment Analysis area:

1. Maintain re-read and re-photograph the following studies at least every 10-15 years.

Study ID	Study Site Name
Dixie Vegetation Trend Studies	
6039	Asay Knoll Exclosure
6040	Asay Knoll High-Fence Exclosure
6041	Asay Knoll Outside Exclosure
6116	Dry Camp
6133	Reed Valley Spring
6135	Reed Valley
7133	Tippets Valley
7152	West Fork Asay Creek
8068	Buck Knoll
9173	Asay Knoll SA
9174	Little Mountain SA
9175	Buck Knoll SA

B. Noxious Weed Prevention Practices

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
INTERMOUNTAIN REGION
ALL NATIONAL FORESTS

Weed Free Hay Order

PROHIBITIONS:

Pursuant to 36 CFR 261.50 (a) and (b), and 36 CFR 261.58(t), a Regional Forester may prohibit possessing, storing, or transporting any part of a tree or other plant, as specified in the Order. By this Order, the following acts are prohibited on the area, roads, and trails as described in this order, all within National Forest System Lands within the Intermountain Region until further notice:

- 1. Possessing, storing, or transporting, non-pelletized hay, straw or mulch on National Forest System Lands without having each individual bale or container tagged or marked as weed free, or having original and current evidence of weed free certification documentation present. All markings must meet the State and/or County standards for certification as weed free.**

EXEMPTIONS:

Pursuant to 36 CFR 261.50 (e) the following persons are exempt from this order:

1. Persons with a permit specifically authorizing them from the effect of this Order.
2. Any member of an organized rescue force in the performance of an official duty.

AREA DESCRIBED:

All National Forest System Lands within the boundaries of the Intermountain Region that include the Ashley, Boise, Bridger-Teton, Caribou-Targhee, Dixie, Fishlake, Humboldt-Toiyabe, Manti-Lasal, Payette, Salmon-Challis, Sawtooth, Uinta and Wasatch-Cache National Forests.

PURPOSE:

The above prohibition is necessary to prevent the spread of noxious weeds into a vulnerable ecosystem on National Forest System lands.

IMPLEMENTATION:

1. This Order will be in effect when signed and shall remain in effect until further notice.
2. Any violation of this prohibition is punishable by a fine of not more than \$5,000 for an individual or \$10,000, for an organization, and/or imprisonment for not more than six (6) months. [Title 16 USC 551, Title 18 USC 3571(b)(6), Title 18 USC 3581 (b)(7)].
3. This Order supersedes any previous orders prohibiting the same, or similar, acts in the above described areas.

Done at Ogden, Utah this 11th day of February 2003.

JACK G. TROYER

JACK G. TROYER
Regional Forester
Intermountain Region

Order Number: 04-00-097

C. Rangeland Improvement Program

1. **Structural Improvements**

No new structures are currently planned

2. **Vegetation Improvement and Management**

Red Desert Vegetation Management Project
Sawyer Point Vegetation Treatment

Special Terms and Conditions

V. **Improvements**

RANGE IMPROVEMENT MAINTENANCE AND LIVESTOCK HERDING STANDARDS

The following maintenance standards apply to all range improvements on the allotment. The permittee shall maintain all range improvements assigned in this permit to the standards listed below. The permittee shall promptly notify the Forest Officer regarding improvements that cannot be maintained to these standards; these improvements will then be scheduled for reconstruction. The livestock herding standards listed below will be followed.

Maintenance work resulting in ground disturbance will require prior authorization. In many instances, archeological and biological surveys will need to be done.

I Range Structural Improvements

1. All improvements (range facilities) on the allotment will be maintained by the assigned permittee (as provided for in Part 2, 8i of the Term Grazing Permit) to a condition adequate to perpetuate the life of the facility and to serve the purpose intended.
2. All improvements will be constructed by cost-sharing between the permittees and the Forest Service unless otherwise specified. Maximum share of improvements by the government will be 50%.

II Stockwater Developments -- Water Troughs (or Tanks), Pipelines and Stockwater Ponds

1. Fences around spring sources will be maintained to the standards established for "range fences" (as below) to prevent livestock from accessing the spring source.
2. Headbox lids or covers shall be in place, or if broken replaced, to prevent dirt, rodents, or other refuse from falling into the headbox.
3. All outlet pipes and valves from headboxes must be functioning properly.
4. Pipeline leaks will be repaired or the damaged section replaced with materials similar to the original construction materials.

5. Pipelines with valve cover boxes will be kept covered and repaired when needed.
6. Water troughs (tanks) will be kept at heights that make them usable to livestock. Troughs that become elevated from livestock trampling will be periodically backfilled to maintain a usable height.
7. Water troughs that become uneven due to settling will be reset and leveled.
8. Water shall not be allowed to overflow the sides of the troughs. Overflow pipes must be kept clear. Overflow pipes will be buried at least 6" deep (unless steel pipe is used) and the end of the overflow pipe must be protected from trampling by livestock (use rocks). Water from the overflow pipe must be directed away from the trough area at least 30 feet.
9. Inlet pipe shall be protected by anchoring to the trough with a single post next to the vertical pipe and brace or pole supporting the horizontal pipe. Inlet and outlet pipeline will be buried at least 6" deep to ensure protection from trampling. Steel pipe will be used where rock or hardpan prohibits digging.
10. All troughs shall be equipped with a wildlife escape ramp. Wildlife escape ramps shall be maintained in a functional capacity to provide access for small mammals and birds.
11. Troughs, storage tanks, and pipelines will be drained and cleaned periodically to prevent algae and debris buildup and damage from freezing.
12. Poles, posts, and trough-framing materials used in the construction of the water development will be maintained, repaired, or replaced as needed.
13. Stockwater ponds will be kept clear of debris, floating logs, dead animals, etc. Spillways will be cleaned and maintained to prevent washing out or becoming plugged.
14. Old posts, troughs, pipe, wire, and other materials that have been removed will be promptly hauled off of the National Forest.

III Range Fences and Corrals

1. All broken wires will be spliced and repaired in such a manner that tension on a wire can be maintained. Wire splices will be made with 12-gauge size tie wire or type of wire used in initial construction. Nicro-press sleeves may also be used.
2. Broken or rotten posts, broken braces, and missing staples will be replaced where and when needed to maintain the fence. Replacement post will be cedar (juniper) or treated material.
3. Wires will be re-stretched where needed.

4. Broken or missing stays will be replaced where needed.
5. Fences will be maintained to meet big game standards (bottom wire 16" above ground, top wire 40-42" above ground) on **all fences constructed to this standard.**
6. Staples will not be driven so deep into the post that they scar or create a weak spot in the wire.
7. All gates will be closed before livestock enter the grazing units and opened and tied back in the fall after livestock leave the allotment.
8. Wire gate tension will be sufficient to prevent the gate from sagging and still be easily opened and closed. **Gate loops will be made from smooth wire (barbless wire), not barbed wire.**
9. Trees that fall on fences will be cut and removed when and where needed; broken wires will be spliced and re-stretched; broken poles will be replaced.
10. Broken or rotten sections of log or pole fences and corrals will be replaced as needed.
11. Corrals will be kept clean of litter, in good repair, and usable condition.
12. Metal posts will be straightened or replaced as necessary. Clips will be used to fasten wire onto metal posts.
13. "Let-down" fences will be let-down promptly when livestock exit the allotment.
14. Old posts and wire that have been removed will be promptly hauled off of the National Forest.

IV Livestock Herding Standards

1. Numbers and season of use will be adjusted annually if determined necessary by the District Ranger.
2. No livestock will be allowed on Forest lands until range readiness as determined by the Forest Service has been reached.
3. Permittees will be required to notify the Forest Service when animals enter the Forest and when they leave at the end of the season.
4. The permittee or association will furnish sufficient riders or herders for proper distribution, protection, and management of livestock on the allotment as required by the Allotment Management Plan (AMP) and/or Annual Operating Instructions (AOI).

5. Distribution is critical as utilization is approached you will be required to move to the next unit or off of the Allotment. Therefore, it is vital that the herd be moved daily out of areas of high concentration to areas typically ignored. Do not allow livestock to concentrate at historically used areas. Strays will not be allowed to stay in previously grazed units and will be moved promptly.
6. Salt should be placed no closer than 1/4 mile from water nor within 100 feet of roads. In some instances, salt may be placed near upland water sources only if there is a problem keeping livestock in the area. Avoid salting in natural passes.
7. Salt will be moved from areas where feed has been used to standards. (IV-37)
8. Livestock should be drifted instead of trailed wherever possible. Prohibit trailing of livestock along the length of riparian areas. Relocate stock driveways where found in riparian areas. Rehabilitate damaged riparian areas to achieve riparian-area goals.
9. Carcasses of dead livestock on National Forest lands will be removed by the owner for a distance of at least three-hundred (300) feet from any live water and one-hundred (100) feet from any trailhead or recreation trail. Carcasses will be removed for a distance of at least five-hundred (500) feet from any campground or picnic area.
10. Rider and herder camps will be kept clean; litter picked up and properly disposed of. Excess hay and other materials will be removed from the camp site when it is moved. Holding pens or corrals used for riding stock will be cleaned up and debris hauled off or disposed of.
11. Only certified noxious weed free hay and straw will be used on the Dixie National Forest.

VI. Annual Operating Instructions

The Forest Officer will develop Annual Operating Instructions (AOI) each year. The AOI will be based on this Allotment Management Plan. Where feasible, multiple year AOI's may be employed with annual adjustments as necessary. The AOI will detail the current season's management schedule, rangeland development program, and use of key areas. These instructions will implement adaptive management in response to the results of the long-term studies. The AOI will become a part of the permit.

ASAY BENCH ALLOTMENT MANAGEMENT PLAN

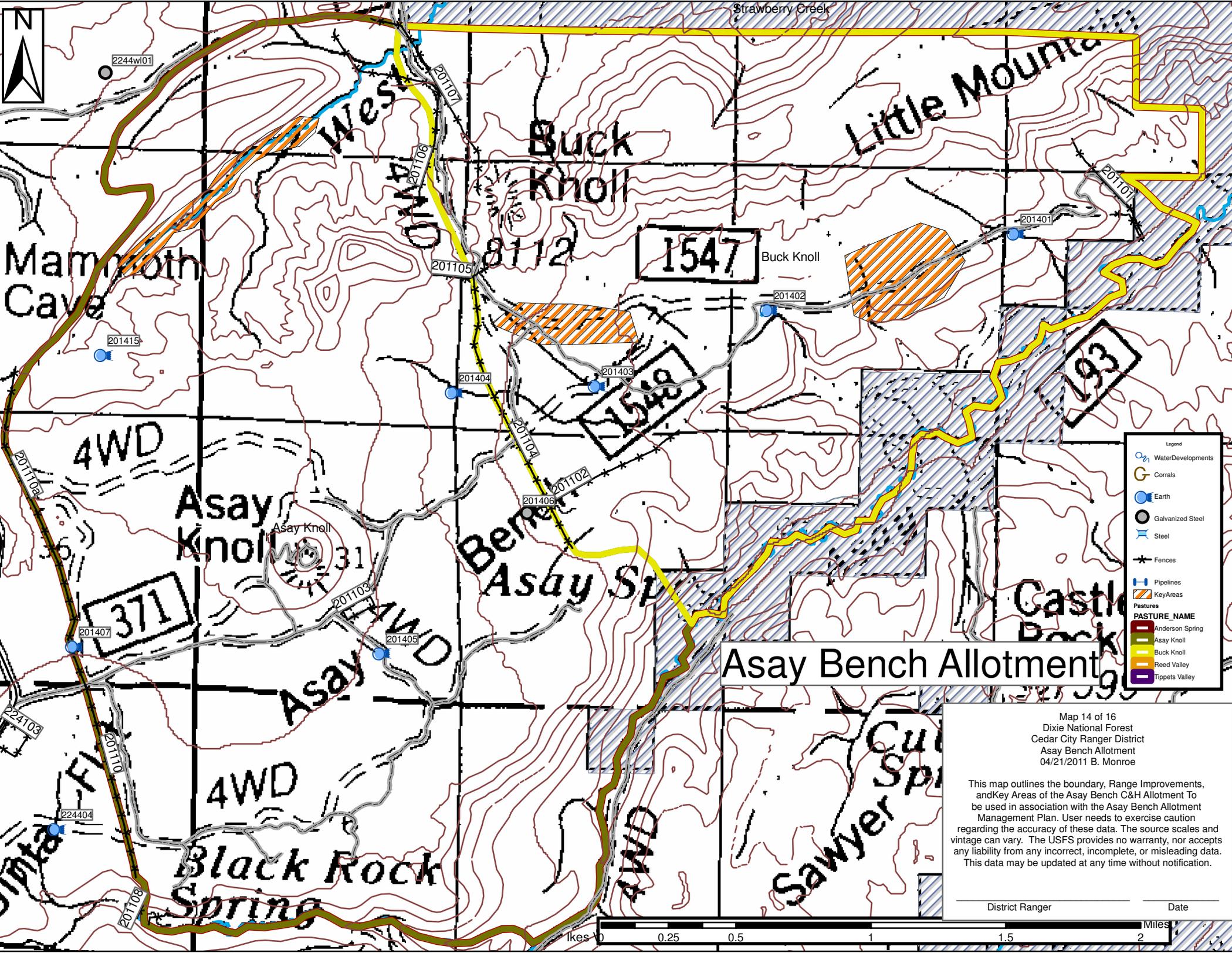
VII. Improvements

FEATURE_ID	FEATURE_NAME	FEATURE_TYPE	SIZE	PERMITTEE_NAME
201101	ASAY CREEK LANE	FENCE	.65	YARDLEY RANCHES LLC
201102	FRUIT HOLLOW DRIFT	FENCE	.56	BRINKERHOFF, LEON & SALLY
201103	ASAY BENCH EXCLOSURE	FENCE	.31	CEDAR CITY RD
201104	ASAY BENCH DIVISION	FENCE	1.27	BRINKERHOFF, LEON & SALLY
201105	BUCK KNOLL DIVISION	FENCE	.24	BRINKERHOFF, LEON & SALLY
201106	WEST FORK RIPARIAN (SOUTH)	FENCE	.95	BRINKERHOFF, LEON & SALLY
201107	WEST FORK RIPARIAN (NORTH)	FENCE	.83	YARDLEY RANCHES LLC
201108	BLACK ROCK SPRING	FENCE	.06	YARDLEY RANCHES LLC
201109	BLACK ROCK DRIFT	FENCE	.03	YARDLEY RANCHES LLC
201109A	BLACK ROCK DRIFT	FENCE	.06	YARDLEY RANCHES LLC
201110	BLACK MTN BOUNDARY	FENCE	1.25	YARDLEY RANCHES LLC
201110A	BLACK MTN BOUNDARY	FENCE	.75	YARDLEY RANCHES LLC
201111	TOMMY CREEK/REEDS DIVISION	FENCE	.2	PALMER, ORVAL & GERTA L.
201112	TOMMY CREEK RIPARIAN	FENCE	1.4	CEDAR CITY RD
201113	ANDERSON SPRING/TIPPETS DIVISION	FENCE	.24	PALMER, ORVAL & GERTA L.
201114	ANDERSON SPRING/ DUCK CREEK	FENCE	.02	BRINKERHOFF, LEON & SALLY
201115	HORSE PASTURE BOUNDARY	FENCE	.07	BRINKERHOFF, LEON & SALLY
201116	RED DESERT BOUNDARY	FENCE	1.38	YARDLEY RANCHES LLC
2011WL01	UPPER TIPPETS ELK EXCLOSURE	FENCE	.15	CEDAR CITY RD
201201	ANDERSON SPRING	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
2012WL021	HOUSTON MTN SPRING	WATER_SYSTEM		BRINKERHOFF, LEON & SALLY
201301	ANDERSON SPRING PIPELINE	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201401	LOWER BUCK KNOLL RESERVOIR	WATER_SYSTEM		YARDLEY RANCHES LLC
201402	MIDDLE BUCK KNOLL RESERVOIR	WATER_SYSTEM		YARDLEY RANCHES LLC
201403	UPPER BUCK KNOLL RESERVOIR	WATER_SYSTEM		BRINKERHOFF, LEON & SALLY
201404	ASAY BENCH RESERVOIR	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201405	UPPER ASAY BENCH RESERVOIR	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201406	ASAY BENCH GUZZLER	WATER_SYSTEM		CEDAR CITY RD
201407	BLACK MTN BOUNDARY RESERVOIR	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201408	LOWER TIPPETS POND	WATER_SYSTEM		YARDLEY RANCHES LLC
201409	LAVA SEEP POND	WATER_SYSTEM		BRINKERHOFF, LEON & SALLY
201410	ANDERSON SPRING TROUGH	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201410A	ANDERSON SPRING POND	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201411	ANDERSON SPRING RESERVOIR	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201412	DRY CAMP POND	WATER_SYSTEM		YARDLEY RANCHES LLC
201413	UPPER TIPPETS VL POND	WATER_SYSTEM		PALMER, ORVAL & GERTA L.
201414	LOWER TIPPETS POND	WATER_SYSTEM		BRINKERHOFF, LEON & SALLY
201415	WEST FORK ASAY POND	WATER_SYSTEM		YARDLEY RANCHES LLC

V. Graphics and Appendices

A. Boundary/Range Improvement/ Key Areas Map.

B. Map Capable Acres



Strawberry Creek

Little Mountain

Buck Knoll

Mammoth Cave

1547

Buck Knoll

8112

1548

193

4WD

Asay Knoll

Asay Spring

Castle Rock

Asay Bench Allotment

371

Asay Spring

4WD

Black Rock Spring

4WD

Sawyer Spring

Legend

- Water Developments
- Corrals
- Earth
- Galvanized Steel
- Steel
- Fences
- Pipelines
- Key Areas

PASTURES

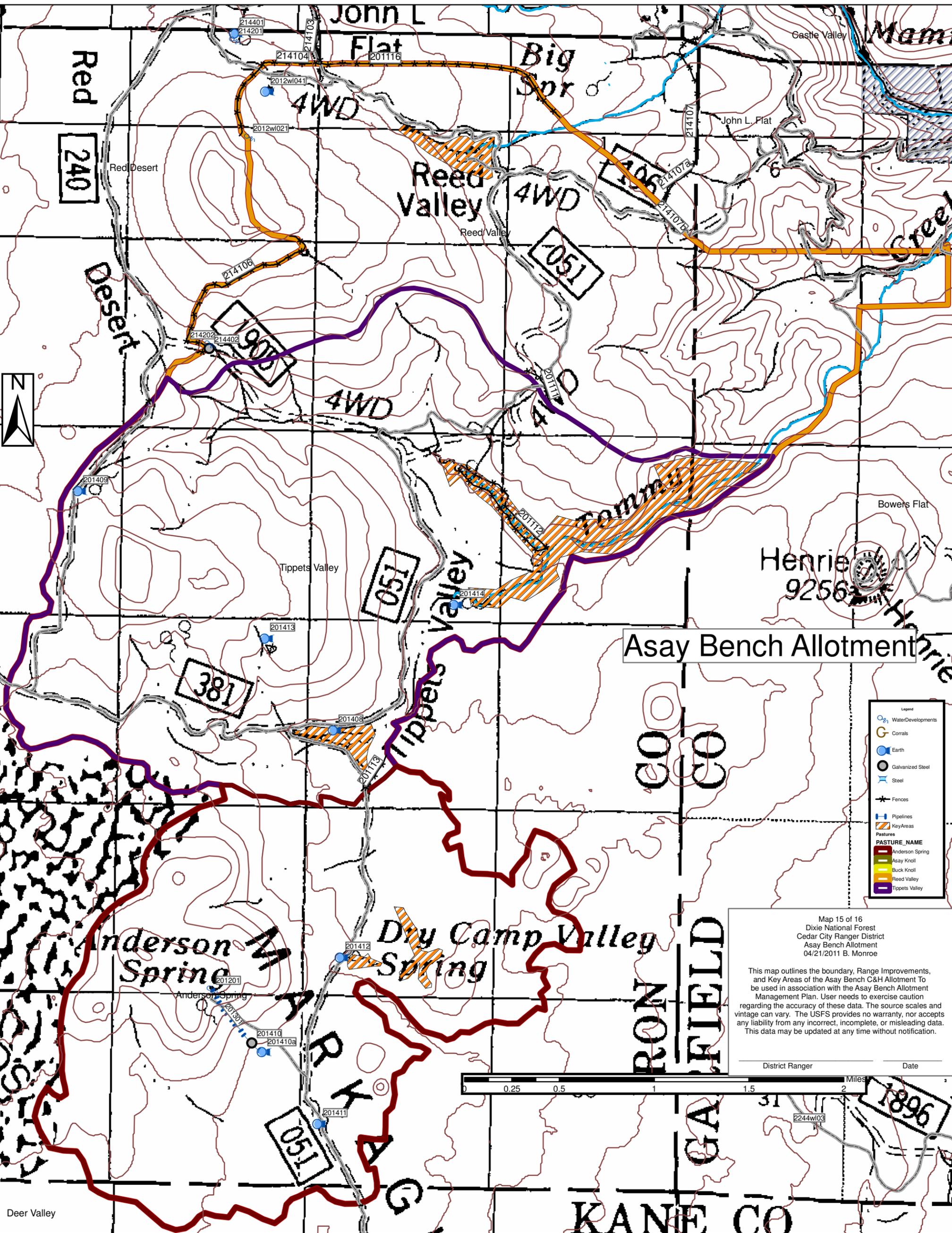
PASTURE_NAME
Anderson Spring
Asay Knoll
Buck Knoll
Reed Valley
Tippets Valley

Map 14 of 16
 Dixie National Forest
 Cedar City Ranger District
 Asay Bench Allotment
 04/21/2011 B. Monroe

This map outlines the boundary, Range Improvements, and Key Areas of the Asay Bench C&H Allotment To be used in association with the Asay Bench Allotment Management Plan. User needs to exercise caution regarding the accuracy of these data. The source scales and vintage can vary. The USFS provides no warranty, nor accepts any liability from any incorrect, incomplete, or misleading data. This data may be updated at any time without notification.

District Ranger _____ Date _____

0 0.25 0.5 1 1.5 2 Miles



Asay Bench Allotment

Legend

- Water Developments
- Corrals
- Earth
- Galvanized Steel
- Steel
- Fences
- Pipelines
- Key Areas

PASTURE_NAME

- Anderson Spring
- Asay Knoll
- Buck Knoll
- Reed Valley
- Tippetts Valley

Map 15 of 16
 Dixie National Forest
 Cedar City Ranger District
 Asay Bench Allotment
 04/21/2011 B. Monroe

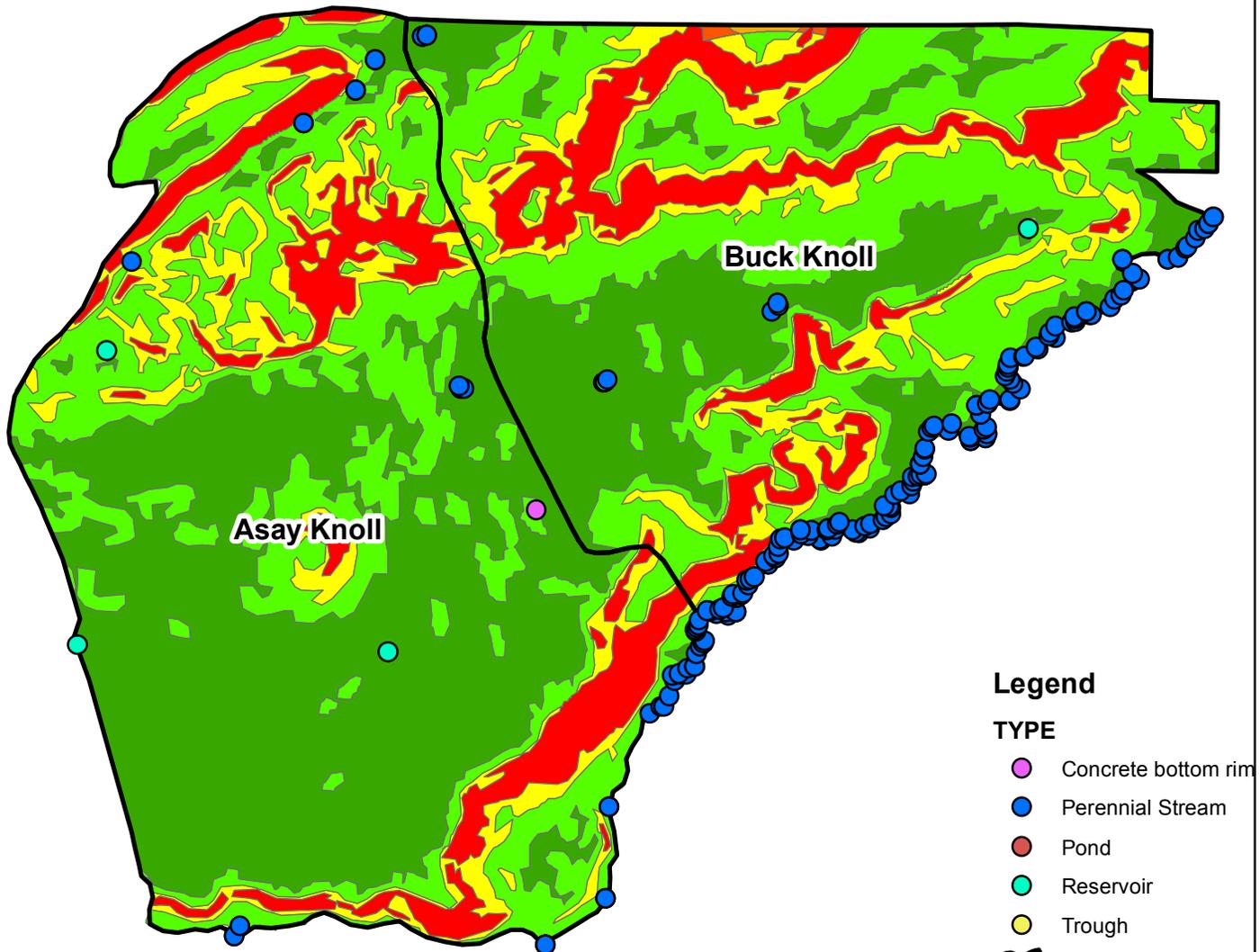
This map outlines the boundary, Range Improvements, and Key Areas of the Asay Bench C&H Allotment To be used in association with the Asay Bench Allotment Management Plan. User needs to exercise caution regarding the accuracy of these data. The source scales and vintage can vary. The USFS provides no warranty, nor accepts any liability from any incorrect, incomplete, or misleading data. This data may be updated at any time without notification.

District Ranger _____ Date _____



Asay Bench Allotment (Lower) Capable Acres

Total Acres - 6,285
Capable - 4,313



Legend

TYPE

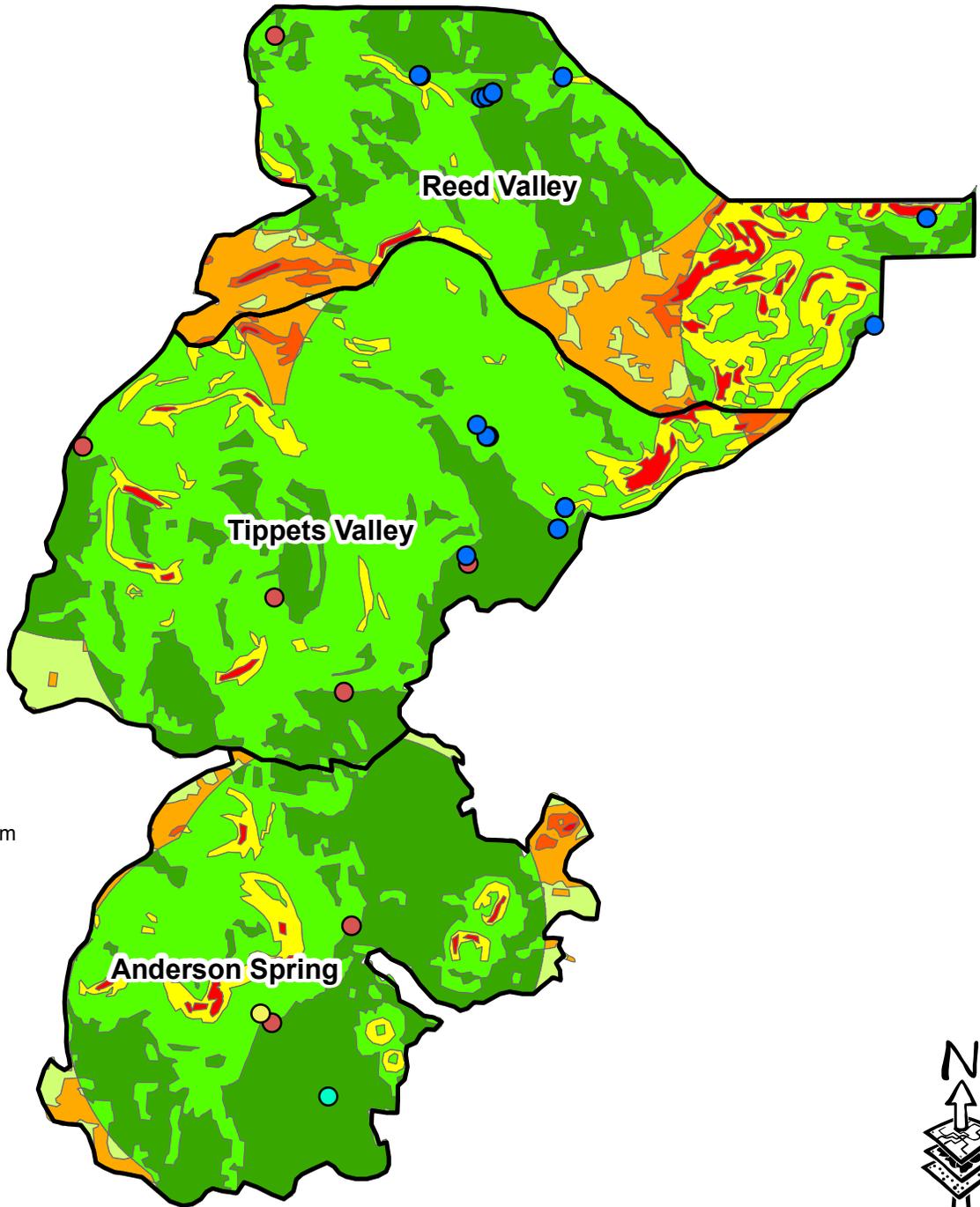
- Concrete bottom rim
- Perennial Stream
- Pond
- Reservoir
- Trough
- Pasture

Capability Factor

- 1
 - 0.7
 - 0.5
 - 0.4
 - 0.35
 - 0.2
 - 0
- 1:40,000

Asay Bench Allotment (Upper) Capable Acres

Total Acres - 9,329
Capable - 6,737



Legend

TYPE

- Concrete bottom rim
- Perennial Stream
- Pond
- Reservoir
- Trough
- Pasture

Capability Factor

- 1
- 0.7
- 0.5
- 0.4
- 0.35
- 0.2
- 0

1:55,000

0 0.3 0.6 1.2 1.8 2.4 Miles



C. Horman
5/2/12
NAD 83 UTM 12