



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

South Puget Sound Region
WILDFIRE FUELS REDUCTION CONTRACT
Invitation to Bid - Greenwater Project

GENERAL PROJECT DESCRIPTION

Project: thin, prune, chip forest material generated by work to create shaded fuel breaks in order to reduce the risk of catastrophic wildfire. Project includes brush pile chipping at six private homeowner locations.

PROJECT NAME

Greenwater 2010 NFP Shaded Fuel
Break Project

PROJECT & BID CONTACT

Jane Potter
(360) 802-7030
Jane.potter@dnr.wa.gov
Washington State Department of
Natural Resources
South Puget Sound Region
950 Farman Ave. No.
Enumclaw, WA 98022

CONTENTS OF THIS BID PACKET

Notice to Bidders
Bidding Requirements and Award of
Contract
Sealed Bid Form
Map

LOCATION

Pierce County, Greenwater

BID DUE DATE & TIME

November 04, 2010
4:00 p.m. (PST)

Notice to Bidders

The Washington State Department of Natural Resources (DNR) is soliciting bids for shaded fuel break and brush pile chipping work, Pierce County, Washington, as shown on the attached map and described in Scope of Work of the Grant Agreement. Total grant amount available is \$77,000.

Project End Date July 31, 2011.

Bidding will be by sealed bid.

Bids must be labeled on both the bid form and envelope as follows:

Sealed Bid Greenwater 2010 NFP Shaded Fuel Break Project

BID DEADLINE

Bids will be accepted at the state Department of Natural Resources:

Until 4:00 p.m. on November 04, 2010

Mail or hand-deliver bids to the following address:

Washington State Department of Natural Resources
950 Farman Ave., No.
Enumclaw, WA 98022
Attn: Jane Potter

Questions pertaining to this bid or contract can be addressed by:
Jane Potter, DNR South Puget Sound Region Environmental Outreach Specialist
(360) 802-7030

Bidding Requirements and Award of Contract

Bidders are expected to bid on the job on a lump sum basis...Refer to Attachment B of Sample Contract for details of this project's Scope of Activities.

Bids will be submitted using the bid form provided by DNR.

Bidders will submit

- Sealed bid form
- Their experience doing this type of work (3 year minimum experience required).
- Staffing—crew structure, number of workers, use of subcontractors
- Schedule—earliest date that work could begin. Ability to meet contract deadlines
- References including names and phone numbers for which the bidder has worked.

The bids will be delivered by hand or by mail to the Washington State Department of Natural Resources. **Bids must be labeled on both the bid form and envelope** as follows:

“SEALED BID - Greenwater 2010 NFP Shaded Fuel Break Project” and addressed to:

Washington State Department of Natural Resources
950 Farman Ave. No.
Enumclaw, WA 98022
Attn: Jane Potter

Bid deadline to DNR is **November 04, 2010** at 4:00 PM

Award of contract will be based on the following criterion:

- Bid Price
- References
- Experience
- Availability
- Staffing

DNR further reserves the right to reject any or all bids received. DNR has the right to reject bid forms that are incorrectly filled out. A copy of the executed contract will be mailed to the successful bidder.

Prospective bidders are encouraged to visit the contract area! Bidders shall not rely on any verbal representations by the state.



WASHINGTON STATE DEPARTMENT OF
Natural Resources
 Peter Goldmark - Commissioner of Public Lands

Contract: Greenwater 2010 NFP Shaded Fuel Break Project
SEALED BID FORM

Company Name: _____

Legal Status of business; (ex: Sole Proprietorship, partnership): _____

Address: _____

Federal Tax ID/ SS#: _____

UBI #: _____

Phone: _____

Fax: _____

Email: _____

Hereby submits the following bid for the Greenwater 2010 NFP Shaded Fuel Break Project, Pierce County, Washington, as shown on the attached Work Map(s) and described in Scope of Work of the Grant Agreement.

Unit 1 Bid \$ _____

Unit 2 Bid \$ _____

Unit 3 Bid \$ _____

Lump Sum Bid \$ _____ **(including sales tax) for the Total job.**

Bidder's Warranty and Bid Signature

By signing and submitting this bid for the "Greenwater 2010 NFP Shaded Fuel Break Project", the bidder warrants to DNR that they have had an opportunity to fully inspect the contract area and the job requirement specifications. Bidder further warrants to DNR that they enter this bid based upon their own judgment of the job costs and requirements formed after their own examination and inspection of the job area.

 (Signature of Authorized Representative submitting this bid)

Date: _____

 (Print name and title of Authorized Representative submitting this bid)

As mentioned, along with this form PLEASE PROVIDE:

- Experience doing this type of work. (3 year minimum experience)
- Staffing—crew structure, number of workers, use of subcontractors, etc.
- Schedule—earliest date that work could begin. Ability to meet contract deadlines.
- References including names and phone numbers for which the bidder has worked.



WASHINGTON STATE DEPARTMENT OF
Natural Resources
PETER GOLDMARK - Commissioner of Public Lands

Grant to: XXXXXXX

Agreement No FY06-XXX/ KXXX-XXXX-XXX

CFDA Number XXXX

[Federal funding agency]

This agreement is made and entered into by and between Washington State Department of Natural Resources, P.O. Box 47037, Olympia, Washington 98504-7037, hereinafter referred to as the DNR, and Grantee/Contractor Name, Address hereinafter referred to as the Grantee, for the express purposes set forth in the following provisions.

In consideration of the terms, conditions and covenants contained herein, or attached and incorporated and made a part hereof, the parties mutually agree as follows:

SECTION 1. SCOPE OF ACTIVITY UNDER GRANT AGREEMENT

- 1.01** The Grantee will perform the work outlined in Attachment B. It contains the scope of activity, objectives and tasks, and deliverables.
- 1.02** All deliverables required under this agreement must be delivered to the grant manager. All oral reports required under this agreement must be presented at the location requested by the DNR.
- 1.03** The Grantee shall complete all specified activities including submission of reports, and/or other required documentation within the time periods set forth in the agreement. Failure by the Grantee to make satisfactory progress toward completion of the activities or project within the time lines specified in this agreement shall be considered a material breach and shall be grounds for immediate termination of this agreement by the DNR. The DNR has sole discretion to determine whether the Grantee is making satisfactory progress on the activities or project.

SECTION 2. CONDUCT OF WORK

The Grantee shall furnish all necessary qualified personnel, material, and equipment, and manage and direct the same to timely complete the work described in this agreement.

SECTION 3. PERIOD OF PERFORMANCE

3.01 Commencement Date: Subject to its other provisions, the period of performance under this agreement shall commence upon final execution by both parties.

3.02 Completion Date: This agreement shall terminate on **XXX End Date**, or when all of its terms and conditions have been satisfied, whichever is earlier, unless sooner terminated as provided herein.

SECTION 4. RIGHTS AND OBLIGATIONS

Attachment A contains the General Terms and Conditions governing the activities to be performed under this agreement, the nature of the working relationship between the DNR and the Grantee, and specific obligations of both parties. All rights and obligations of the parties to this agreement shall also be subject to and governed by Attachment B, the application form and original budget worksheet, each incorporated by reference herein.

SECTION 5. GRANT DISBURSEMENT AND PAYMENT

5.01 Amount of Grant. The total grant shall not exceed **\$000,000**, including all Washington State taxes and applicable permits and will be disbursed upon satisfactory completion of timely deliverables as described in Attachment B and in compliance with all agreement terms. Grant disbursement shall be on a cost reimbursement basis for costs incurred in the performance of this agreement.

5.02 Time of Disbursement. Disbursement shall be considered timely if made by the DNR within 30 days after receipt of properly completed invoice vouchers. Disbursement shall be sent to the address designated by the Grantee. The DNR may, in its sole discretion, terminate the agreement or withhold disbursements claimed by the Grantee if the Grantee fails to satisfactorily comply with any term or condition of this agreement or if USDA Forest Service federal funding which the DNR receives is no longer available.

5.03 Method of Disbursement. Requests for disbursement under this agreement shall be submitted by the Grantee on invoice vouchers prepared in the manner prescribed by the DNR. These vouchers shall include such information as is necessary for the DNR to determine the exact nature of all expenditures. Each voucher will clearly indicate that it is for activities under this agreement. Requests for disbursement shall be submitted to the DNR grant manager.

5.04 Expenses. No additional requests for costs or expenses are allowable. All costs and expenses associated with the Grantee fulfilling the terms and the agreement's conditions are included in the grant's amount stated in section 5(a) and no additional disbursements shall be made under this agreement.

5.05 Recapture Provision. In the event the Grantee fails to expend funds in accordance with any federal or state law or regulation or the provisions of this agreement, the DNR reserves the right to recapture funds in the amount equivalent to the amount of noncompliance. Repayment by the Grantee of funds under this section shall occur within 30 days of demand.

SECTION 6. FEDERAL SUBCONTRACT

When the DNR is passing federal funds to the Grantee, the Grantee will be considered a "sub recipient."

Sub recipient shall:

6.01 Adhere to the federal Office of Management & Budget guidelines and to other applicable federal and state regulations.

6.02 Have an audit made in accordance with Office of Management and Budget (OMB) Circular A-133 revised June 2003 and effective December 31, 2003 if the sub recipient receives federal assistance, in total from all sources, of \$500,000 or more. The sub recipient must:

1. Forward a copy of the Data Collection Form as required in OMB circular A-133 within 30 days after completion of the Federal Single Audit to the DNR.
2. If the audit reveals findings and questioned costs relating to Federal awards passed through from DNR, forward a copy of the State Auditor's audit, along with the sub recipient response and the final corrective action plan as approved by the State Auditor's Office to the DNR within nine months after the end of the audit period.

6.03 Provide access to grant/financial records for inspection by the DNR or by any duly authorized audit representative of the state of Washington for a period of at least three years after the final grant payment or any dispute resolution.

SECTION 7. ACCEPTANCE

Disbursement shall be payable to the Grantee only upon completion of agreement by the Grantee, and acceptance by the DNR. If a deliverable is not acceptable to the DNR, the DNR shall within ten (10) working days from receipt, notify the Grantee in writing of the nature of the defects in the deliverable and any proposed remedy. The Grantee shall respond to this notice in writing within ten (10) working days specifying action to be taken so as to permit acceptance by the DNR.

SECTION 8. PERFORMANCE REPORTING

The Grantee shall immediately contact the DNR grant manager in person or by fax or by telephone should any adverse conditions arise.

A final report is due to the DNR upon completion date as specified in 3.02.

SECTION 9. INSURANCE

The Grantee shall, at all times during the term of this Agreement at its sole cost and expense, buy and maintain insurance of the types and amounts listed below. Failure to buy and maintain the required insurance may result in the termination of the contract at DNR's option. If the Grantee is self insured, evidence of its status as self-insured shall be provided to DNR, and if deemed acceptable by DNR, shall satisfy the insurance requirements specified by this Section.

Insurance Requirements

Grantee must furnish evidence of insurance in the form of a Certificate of Insurance satisfactory to the DNR, executed by a duly authorized representative of each insurer showing compliance with the insurance requirements set forth below. The Certificate of Insurance must reference DNR and Agreement number. The Grantee must provide proof of coverage before implementing this Agreement.

The Certificate(s) of Insurance must provide 45 days written notice to DNR before the cancellation, non-renewal, or material change of any insurance coverage included therein. Notices must be sent to the DNR's Resource Protection Division office, P.O. Box 47037, Olympia, WA 98504-7037.

Additional Requirements

- All insurance policies must name state of Washington, Department of Natural Resources, as an additional insured.
- All insurance policies must include Other Insurance provisions that state Grantee's policy provides primary insurance coverage.
- All insurance policies must provide liability coverage on an **occurrence** basis unless otherwise specified in this Agreement.
- Policies must be issued by an insurer admitted and licensed by the Insurance Commissioner to do business in the state of Washington. Excess or "surplus lines" carriers must be approved in advance by the Risk Manager (or other authorized representative) of DNR. All insurers must have a Best's rating of B+ or better.

Minimum Coverage Requirements

The Minimum Coverage Requirements set forth the *minimum* limits of insurance the Grantee may purchase to enter a contract with DNR. These limits may not be sufficient to cover all liability losses and related claim settlement expenses. Purchase of these minimum limits of coverage does not relieve the Grantee from liability for losses and settlement expenses greater than these amounts. DNR shall not be charged for the cost for insurance coverage(s) greater than those listed in the Minimum Coverage Requirements without prior approval by DNR.

During the term of the Agreement, Grantee must purchase and maintain the insurance coverages and limits specified below:

- A. Commercial General Liability (CGL) Insurance. Grantee must purchase and maintain CGL on an Insurance Services Office (ISO) form CG 00 01 or equivalent form, covering liability arising from premises, operations, independent contractors, personal injury, products-completed operations, and liability assumed under an insured contract. Such insurance must be provided on an occurrence basis. Insurance must include liability coverage with limits not less than those specified below:

<u>Description</u>	<u>Dollar Amount</u>
General Aggregate Limit	\$2,000,000
Each Occurrence Limit	\$1,000,000

- B. Business Auto Policy (BAP) Insurance. If activities pursuant to this Agreement involve the use of vehicles, the Grantee must purchase and maintain a BAP on an Insurance Services Office (ISO) form CA 00 01 or equivalent form. The Description of Covered Autos must include one or more of the following:

- “Any Auto” (Symbol 1).
- If Grantee-owned personal vehicles are used, the BAP must cover "Owned Autos Only" (Symbol 2).
- If Grantee hires autos, the BAP must cover "Hired Autos Only" (Symbol 8).
- If Grantee employee's vehicles are used, the BAP must cover "Non-Owned Autos Only" (Symbol 9).

Such insurance must be provided on an occurrence basis. The BAP insurance must include liability coverage with limits not less than those specified below. The Grantee is responsible for any deductible.

<u>Description</u>	<u>Each Accident</u>
Bodily Injury and Property Damage	\$1,000,000

- C. Workers’ Compensation and Employer’s Liability Insurance. Grantee must comply at all times with applicable workers' compensation, occupational disease, and occupational health and safety laws, statutes, and regulations (and, if applicable, the Federal Longshoremen's and Harbor Workers' Act and the Jones Act). Such coverage must be afforded for all employees of Grantee, and for all employees of any subcontractor retained by Grantee. Coverage must apply to bodily injury (including resulting death) by accident or disease which arises out of or in connection with the performance of the Agreement. Satisfaction of these requirements shall include, but not be limited to:

1. Full participation in any required governmental occupational injury and/or disease insurance program, to the extent participation in such program is mandatory in any jurisdiction.

2. Purchase of workers' compensation and occupational disease insurance, to the extent such coverage is not provided under a mandatory government program as in paragraph I., above.
3. Maintenance of a legally permitted and governmentally approved program of self-insurance.
4. Grantee must purchase and maintain Employer's Liability or "Stop Gap" Insurance to include liability coverage with limits not less than those specified below. Grantee waives immunity under Title 51 RCW to the extent required by this clause. Insurance must include liability coverage with limits not less than those specified below:

<u>Description</u>	Each Employee	Policy Limit	
	<u>By Accident</u>	<u>By Disease</u>	<u>By Disease</u>
Bodily Injury	\$1,000,000	\$1,000,000	\$1,000,000

Except where prohibited by law, workers' compensation coverage shall provide for a waiver of rights of subrogation against DNR, its directors, officers, and employees. If DNR incurs fines or is required by law to provide coverage or benefits due to failure by Grantee, or any subcontractor retained by Grantee, to effect or maintain a program of compliance with all applicable workers' compensation, occupational disease, and occupational health and safety laws, statutes and regulations, Grantee must indemnify DNR for all benefits, costs, and fines. Amounts owed to DNR by Grantee pursuant to any such indemnity may not be deducted for any payments owed by DNR to Grantee for performance of this Agreement.

Breach of Contract

Failure by Grantee to maintain or show evidence of insurance or comply with any of the provisions in this Agreement is a material breach of contract. Upon breach of contract, Department may, at its discretion, cancel or suspend the Agreement. All monies paid by DNR on behalf of Grantee shall be repaid to DNR on demand.

SECTION 10 GRANT MANAGER

The grant manager for the Grantee is: The grant manager for the DNR is:

Contractor
Company Name
Street Address
City, State, Zip
Phone Number

Regional Manager
Washington Department of Natural Resources
Street Address
City, State, Zip
Phone Number

SECTION 11 SIGNATURES

Dated _____, 20 _____ **CONTRACTOR/COMPANY**

By: _____

Title: _____

**STATE OF WASHINGTON
DEPARTMENT OF NATURAL RESOURCES**

Dated _____, 20 _____ By: _____

Title: _____

Approved As To Form
By Janis Snoey
The Assistant Attorney General
State of Washington
November 20, 2008

ATTACHMENT A

GENERAL TERMS AND CONDITIONS

SECTION 1. IDENTIFICATION

The Grant Agreement Number must appear on all documents, correspondence, invoices and all other written material submitted or prepared in conjunction with this agreement.

SECTION 2. INDEPENDENT CAPACITY OF GRANTEE

The Grantee and its employees or agents performing under this agreement are not employees or agents of the DNR. The Grantee will not represent itself nor claim to be an officer or employee of the DNR or of Washington State by reason hereof, nor will the Grantee make any claim of right, privilege or benefit which would accrue to an employee under Washington law.

SECTION 3. DEDUCTION

The DNR shall make no deductions from the stated amount of the grant for income tax, social security taxes, medical insurance, industrial insurance, license fees or deduction of any other kind. Grantee is responsible for all deductions for which the Grantee may be liable.

SECTION 4. RETENTION OF RECORDS

The Grantee shall maintain books, records, documents and other materials, which sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this agreement. These materials shall be available at all reasonable times for inspection, review, or audit by personnel duly authorized by the DNR, and state or federal officials so authorized by law, rule, regulation or contract. The Grantee will retain these materials for three (3) years after settlement or termination.

If any litigation, claim or audit is started before the expiration of the three (3) year period, the records shall be retained until all litigation, claims, or audit findings involving the records have been resolved.

SECTION 5. RIGHTS OF INSPECTION

The Grantee shall provide right of access to its facilities to the DNR or any of its officers, or to any other authorized agent or official of Washington State or the federal government at all reasonable times, in order to monitor and evaluate performance, compliance, and/or quality assurance under this agreement.

SECTION 6. CLOSE OUT

The Grantee must submit all requests for reimbursement for activities under this agreement to the DNR so that they are received no later than thirty (30) days following the termination of this agreement. If an earlier date is specified in this agreement, the earlier date shall take precedence.

SECTION 7. NON-DISCRIMINATION

During the performance of activities under this agreement, the Grantee shall comply with all federal and state non-discrimination laws, regulations and policies. In the event of the Grantee's non-compliance or refusal to comply with any non-discrimination law, regulation, or policy, this agreement may be rescinded, cancelled or terminated in whole or in part, and the Grantee may be declared ineligible for further agreements with the DNR.

SECTION 8. ASSIGNABILITY

This agreement, and any claim arising under this agreement, is not assignable or delegable by the Grantee either in whole or in part.

SECTION 9. TERMINATION FOR FUNDING REASONS

The DNR may unilaterally terminate this agreement in the event that funding from federal, state or other sources becomes no longer available to the DNR, or is not allocated for the purpose of meeting the DNR's obligation hereunder. Such action is effective when the DNR sends written notification of termination.

SECTION 10. TERMINATION FOR CONVENIENCE

The DNR may terminate this agreement in whole or in part by written notice to the Grantee when it is in the best interest of the DNR. If this agreement is so terminated, the DNR shall be liable only for disbursements in accordance with the terms of this agreement for activities completed prior to the effective date of termination.

SECTION 11. COMPLIANCE WITH APPLICABLE STATUTES, RULES AND POLICIES

All applicable state and federal laws and regulations, and agency policies govern this agreement.

SECTION 12. DEBARMENT CERTIFICATION AND COMPLIANCE

By execution of this Agreement and sub award, Grantee certifies to DNR that it is not delinquent on any federal debt pursuant to OMB Circular A-129, and that it is not or its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal agency pursuant to government-wide regulations.

ATTACHMENT B

Scope of Activity for Project Name

Project Scope of Work

The project scope of work consists of fuels reduction/shaded fuel break work on private, industrial, and DNR forest lands. Grantee will perform fuel modification, vegetative clearing, fire hazard tree removal, tree thinning and pruning, chipping, and debris disposal by hand crews. The project is located in Pierce County, in Sections 10 and 25, Township 19N, and Range 9 East.

Estimated Fuels Reduction/Shaded Fuel Break Acres: 36

Estimated Scotch Broom removal Acres: 3

Greenwater CWPP/ NFP Project Map- See Appendix 1

Fuels reduction/shaded fuel breaks work will be broke into units:

Unit 1 - consists of completing the Crystal Village # 3 Fuel Break (North side of Highway 410) to the existing USFS Boundary Creek Road /Crystal River Ranch Powerline Shaded Fuel Break (South side of Highway 410).

Unit 2 - consists of completing a shaded fuel break on the DNR Stubbs Road property by tying together the natural fuel breaks of Greenwater River and White River.

Unit 3 - consists of removing the existing brush piles generated by local homeowners/volunteers during Firewise defensible space projects and the cutting/piling of Scotch Broom on Crystal Village's 1 and 2 community property for disposal.

Grantee will be expected to:

1. Provide all labor, transportation, materials, and equipment for all project work.
2. Supervise and monitor (grantee's company name) fuels reduction crew work.
3. Meet all Forest Fire Protection Requirements and Industrial Fire Precaution Level restrictions.
4. Be responsible for preventing damage to timber, soil, water, and/or improvements in the contract area and to adjacent timber, soil, water and/or improvements.
5. Be responsible to preserve survey markers, utility lines and boxes, waterlines and hydrants, culverts, etc and will replace damaged said items at their own expense using appropriate equipment/personal acceptable to the landowner.

Determination of Payment

1. Contract compliance inspection of work performed and payment for work performed will be based on percentage of total contract area completed.
2. Using specifications contained in Specifications and Treatment sections in this Scope of Work DNR representative will inspect and determine if work performed is satisfactory.
3. Contractor will submit monthly payment invoices to DNR Contract Compliance Manager no later than the 10th of each month for the approved work completed the previous month.

PROJECT COMPLETION DATE of July 31, 2011.

Fuels reduction/shaded fuel break work on private, industrial, and DNR forest lands:

1. Grantee will be required to cut, remove, and to chip trees, brush and any natural forest materials generated by the shaded fuel break project.
2. Grantee will construct shaded fuel breaks, in the areas shown on the attached "Unit Project Maps," according to the specifications listed below.

Special Requirements for Equipment:

Ground disturbance from vehicles/machinery use that produce berms, ruts and other operator caused ground disturbance will be smoothed out to original contours before leaving the immediate work area.

Pruning/Limbing Specifications

Definitions

1. **Prune** – To remove completely from the trunk dead and living branches and branch remnants.
2. **Branch Collar** – A wrinkled bark line encircling the branch where the branch joins the trunk.
3. **Injury** – Exposure of living branch collar tissue or trunk tissue resulting from the contractor's operation.
4. **Tree Damage** –
 - One or more trunk scars (exposing the cambium layer) which in total exceeds 75 square inches.
 - The live crown is reduced by over 50% of original crown
 - One third of the circumference of the root system is damaged such that the cambium layer is exposed.

Pruning/limbing Treatment Specifications

1. Conifer trees that require pruning shall be pruned of all branches from the ground to a height of fifteen (15) feet above the ground. On sloping ground, height is measured from the higher point on the ground. No pruning will be done to a height greater than 50% of total tree height.
2. Branches are to be pruned to within one (1) inch of the branch collar. Branch splinters resulting from pruning operations shall not protrude more than one (1) inch from the branch collar.
3. Pruning shall be accomplished in a manner that does not cause tree injury/damage. Tools and equipment (such as “Tree Monkeys” and climbing spurs) that cause tree injury/damage shall not be used. Operations shall be conducted in a manner that does not cause tree injury/damage.

NOTE: See Appendix 6, Pruning/Limbing Diagram. The Appendix 6 is attached and incorporated herein by this reference.

NOTE: Any cutting, removal, or damage of forest products by Grantee, its employees, agents, or invitees, including independent contractors, in a manner inconsistent with the terms of this contract or State law, is unauthorized. Such activity may subject Grantee to liability for triple the value of said forest products under RCW 79.02.320 or RCW 79.02.300 and may result in prosecution under RCW 79.02.330 or other applicable statutes.

UNIT 1 -USFS Boundary Creek/Crystal Village Shaded Fuel Break

This shaded fuel break on private land is designed to protect private and USFS forest land from a structure fire, escaped recreation fire, or wildfire. This shaded fuel break will also protect the Crystal Villages' water system from wildfire. The unit boundaries are marked in pink/black candy-striped ribbon. The estimated size is twenty four (24) acres. See Appendix 2.

Unit 1– Crystal Village 3 Shaded Fuel Break Specifications:

1. Hardwood trees encroaching on this forest roadway, up to Hancock Timber ownership, will be removed to permit access by fire and emergency vehicles. The trees to be cut will be marked with blue paint by the DNR. The cut limbs and stems of trees, not suitable for firewood, will be chipped and scattered on the forest floor. Note: The stems of trees, 6 inches and greater in diameter breast height (DBH), will be considered suitable for firewood, and will be cut to 12 foot lengths and left in place for the landowner. Firewood logs will not be left in concentrated piles but will be separated by 10 feet.
2. Dead and down material less than 6 inches in diameter will be chipped and the chips scattered over the work site.
3. The limbs of dead and down trees greater than 6 inches in diameter will be cut, chipped, and scattered onto the forest floor.
4. Standing dead trees less than 6 inches DBH shall be felled, chipped, and scattered onto the forest floor.
5. Snags that pose a hazard to crews working in the area will be felled.
6. Trees 6 inches and greater in diameter (DBH) will be pruned (live and dead limbs) up to a height of 15 feet measured from the uphill side. No pruning will be done to a height greater than 50% of total tree height. The cut limbs and stems will be chipped on site and scattered on forest floor. Trees less than 6 feet high do not require pruning.
7. Trees less than 6 inches DBH will be thinned leaving 10 feet between crowns and pruned up to a height of 15 feet measured from the uphill side. No pruning will be done to a height greater than 50% of total tree height. The cut limbs and stems of trees less than 6 inches in DBH will be chipped on site and scattered on the forest floor.
8. Non-coniferous brush and Scotch Broom will be cut and chipped on site.
9. All vegetation stump heights will be cut no higher than 2 inches above the ground. All cuts will be a flat or parallel cut to the ground.

UNIT 2 - Stubbs Road Shaded Fuel Break

This shaded fuel break on DNR forest land is designed to protect Greenwater from an approaching wildfire. This shaded fuel break will also protect DNR trust lands from a structure fire or escaped recreation fire. The boundaries are marked in pink/black candy striped ribbon. The estimated size is twelve (12) acres. See Appendix 2. Appendix 2 is attached and incorporated herein by this reference.

Unit 2 – Stubbs Road Shaded Fuel Break Specifications:

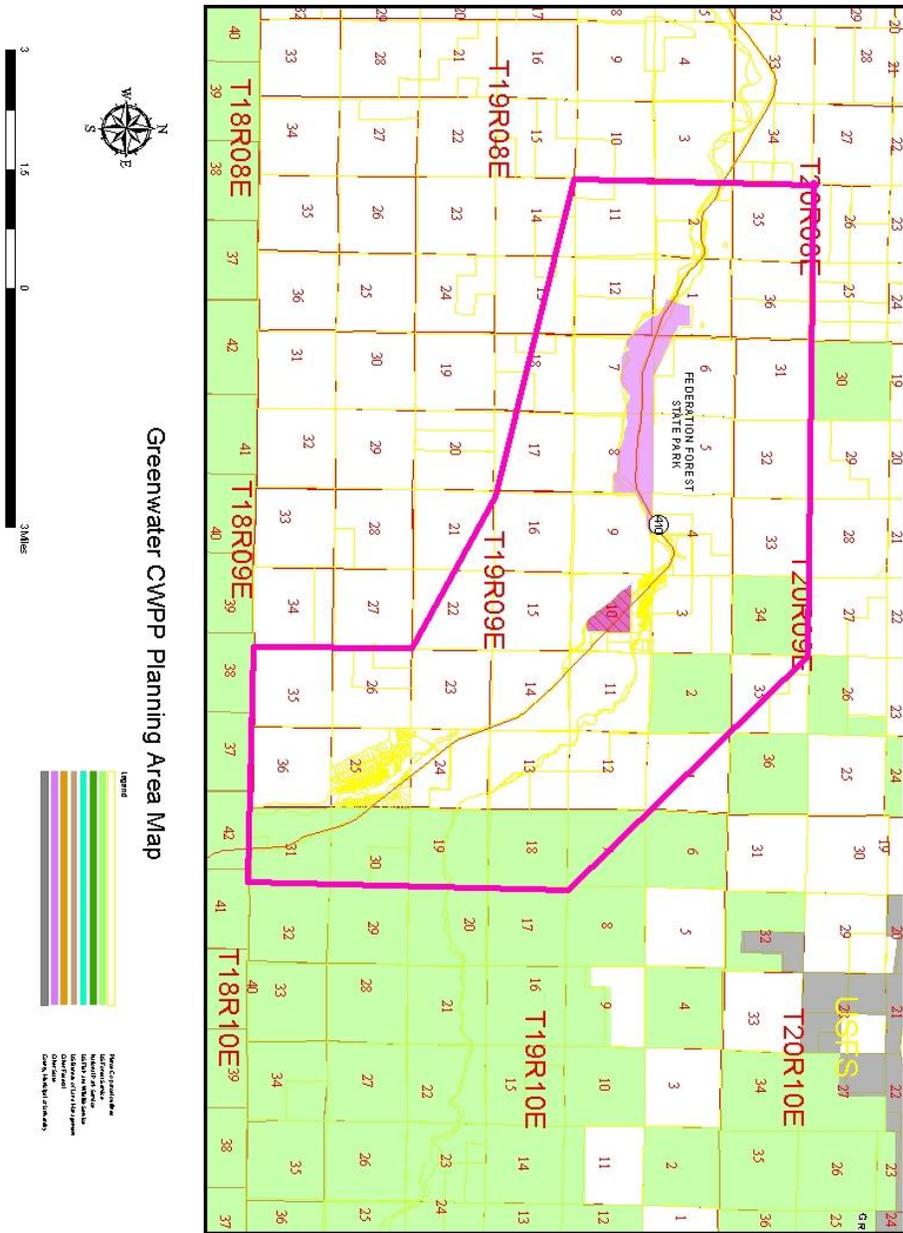
1. Dead and down material less than 6 inches in diameter will be chipped and the chips scattered over the work site.
2. The limbs of dead and down trees greater than 6 inches in diameter will be removed and chipped and the remaining trunk will be cut to 12 foot lengths and left in place for the landowner. Firewood logs will not be left in concentrated piles but will be separated by 10 feet.
3. Standing dead trees less than 6 inches DBH shall be felled and treated using the dead and down prescription as required in item 1 and 2 of this section.
4. Snags that pose a hazard to crews working in the area will be felled.
5. Trees 6 inches and greater DBH will be pruned (live and dead limbs) up to a height of 15 feet measured from the uphill side. No pruning will be done to a height greater than 50% of total tree height. The cut limbs and stems will be chipped on site and scattered on forest floor. Trees less than 3 feet high do not require pruning.
6. Trees less than 6 inches DBH will be thinned leaving 10 feet between crowns and pruned up to a height of 15 feet measured from the uphill side. No pruning will be done to a height greater than 50% of total tree height. The cut limbs and stems of trees less than 6 inches in DBH will be chipped on site and scattered on the forest floor.
7. Non-coniferous brush and Scotch Broom will be cut and chipped on site.
8. All vegetation stump heights will be cut no higher than 2 inches above the ground. All cuts will be a flat or parallel cut to the ground.

UNIT 3 - Crystal River Ranch and Crystal Villages I, II, and III Defensible Space and Scotch Broom Removal

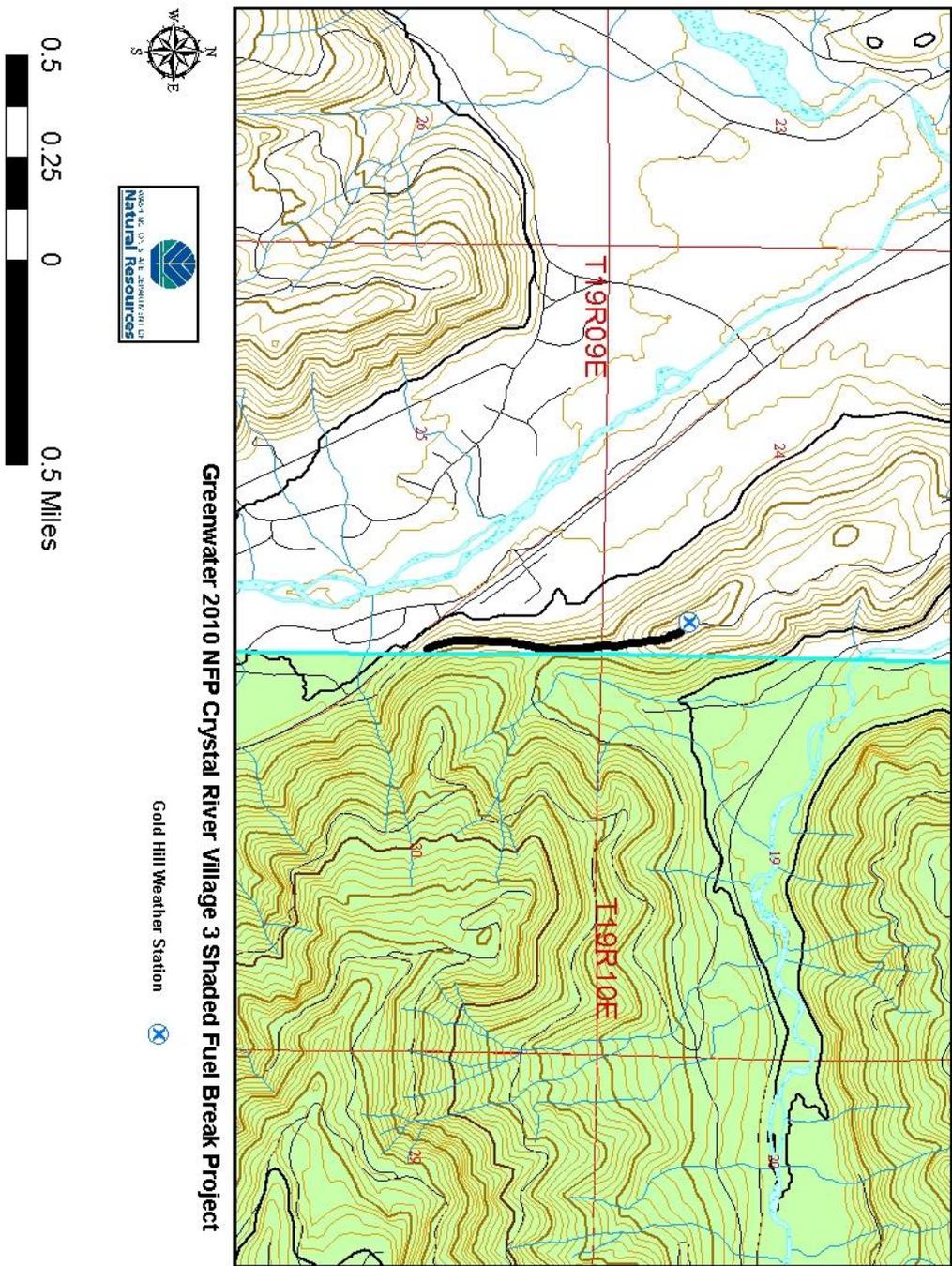
The existing brush piles generated during defensible space cleanup and stacked on roadways by residents/volunteers will be chipped by the Grantee. The chips will be utilized by the homeowners or transported by the Grantee to the Crystal River Ranch horse corral. **Note: The brush pile locations are listed in Appendix 7. Appendix 7 is attached and incorporated herein by this reference.**

The removal of Scotch Broom will protect Crystal Village I and Crystal Village II during the event of a wildfire. The two connecting Crystal Village I common areas and the forested common area bordering Crystal Village II consists of approximately three (3) acres. The Grantee shall cut and pile on site all Scotch Broom within these common areas. Scotch Broom will be cut no higher than 2 inches above the ground. All cuts will be a flat or parallel cut to the ground. Grantee is not responsible for disposal of slash piles. **Note: The Scotch Broom sites are marked on the attached map for Unit 3 - See Appendix 5. The Appendix 5 is attached and incorporated herein by this reference.**

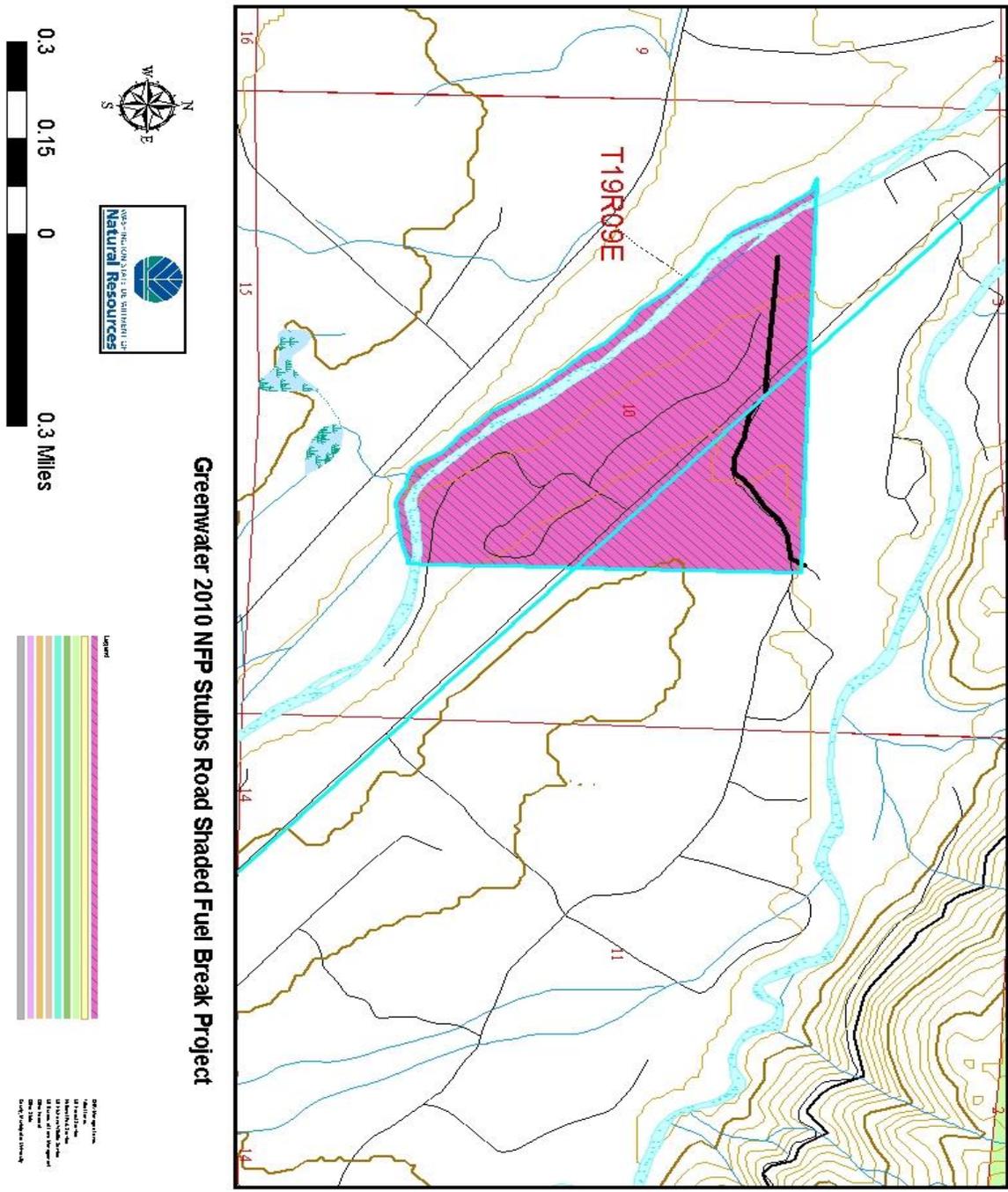
Appendix 1



Appendix 3

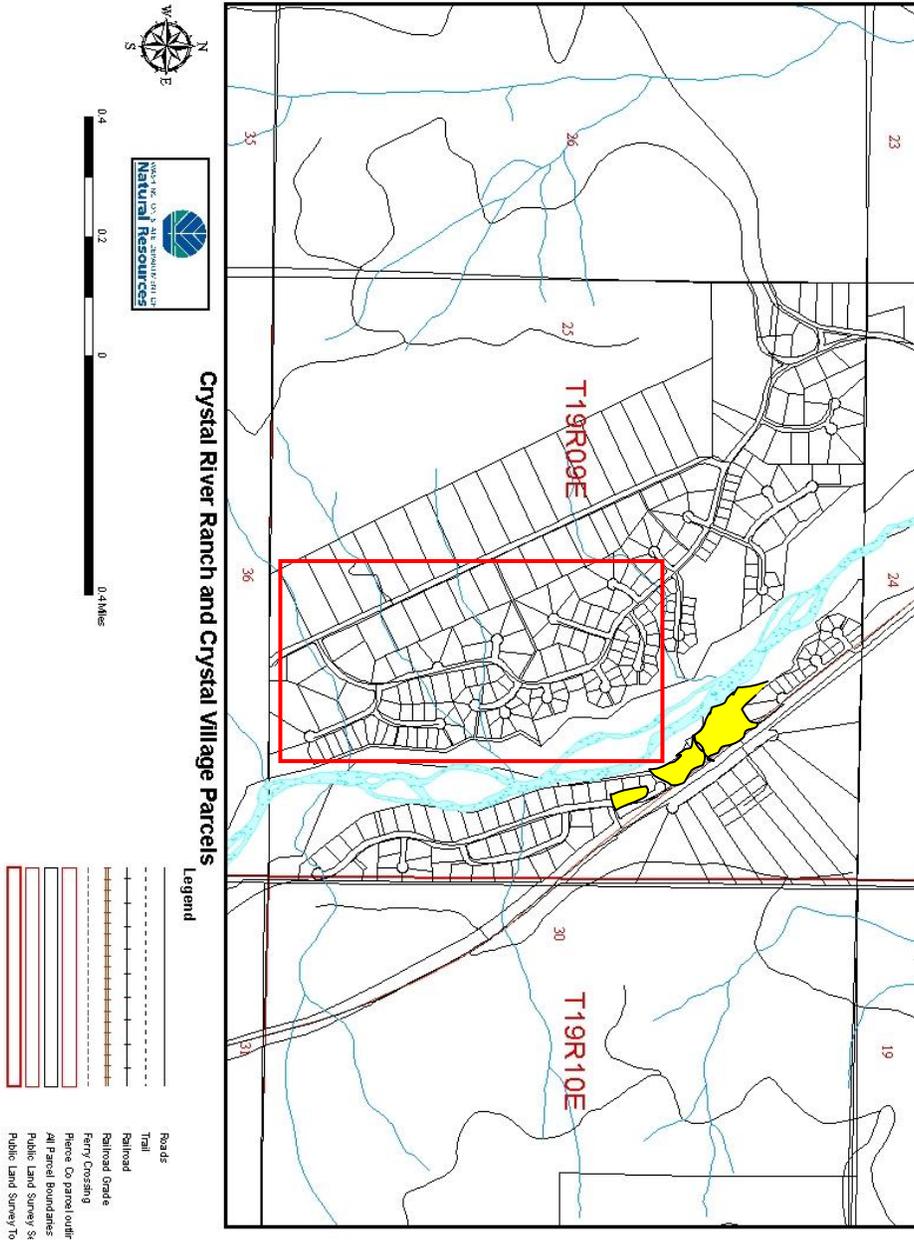


Appendix 4

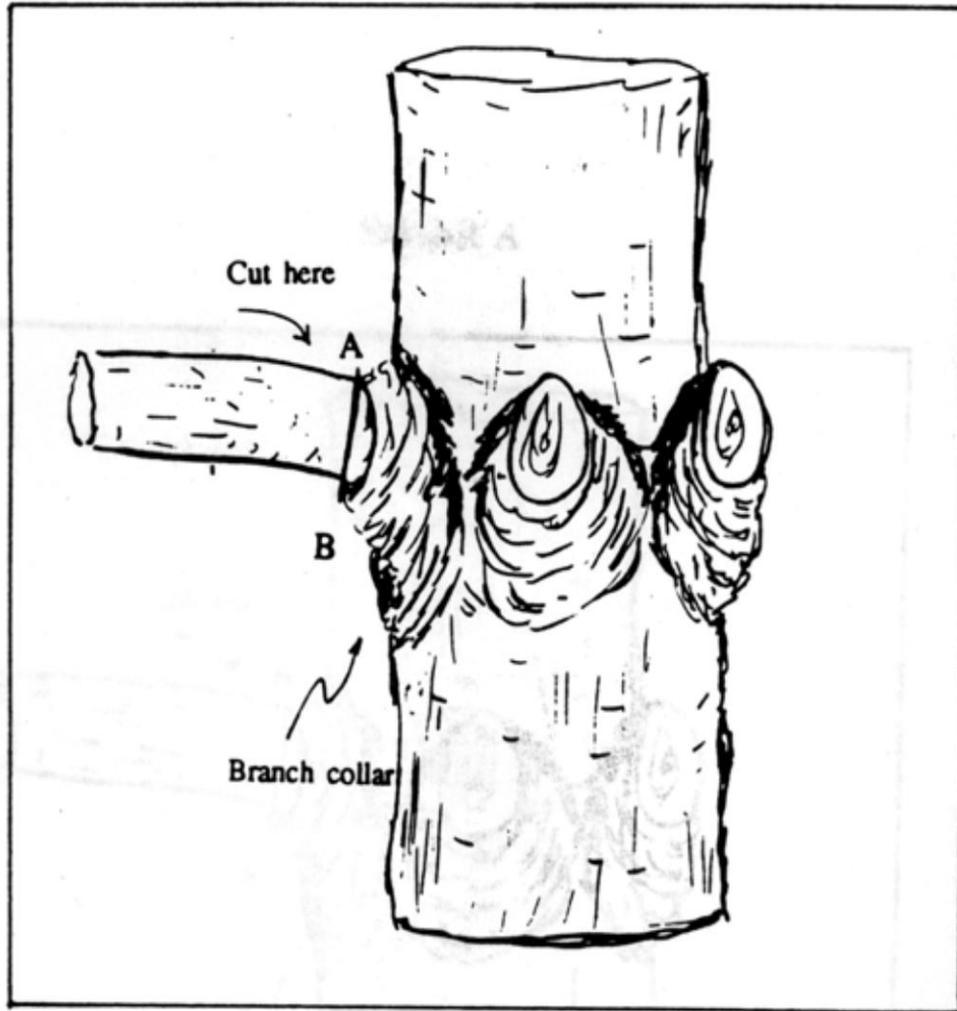


Appendix 5

- Scotch Broom Removal Area**
- Landowner Brush Piles – General Area**



Appendix 6 Pruning/Limbing Diagram



Appendix 7

Greenwater Firesafe Project Homeowner Brush Pile Locations

- **Tidball-16815 Mountainside Drive Crystal River Ranch**
- **Hatfield-17109 Riverview Way E Crystal River Ranch**
- **Ridgeway-17404 Alpine Way Crystal River Ranch**
- **Eidsmoe-62609 Elk Trail Way Crystal River Ranch**
- **Gebenini-62621 Elk Trail Way Crystal River Ranch**
- **Nate-16028 Crystal Dr E Crystal Village I**