

DEED OF CONSERVATION EASEMENT
FOR NORTH STAR PRESERVE

THIS DEED CONTAINS RESTRICTIONS ON THE USE AND DEVELOPMENT OF THE PROPERTY WHICH ARE INTENDED TO PROTECT ITS OPEN SPACE VALUES.

THIS DEED OF CONSERVATION EASEMENT is made this 3rd day of September 2002, by the Board of County Commissioners of Pitkin County, Colorado, a political subdivision and home rule county of the State of Colorado (the "Grantor"), and the Aspen Valley Land Trust ("Grantee").

Recitals

A. Grantor is the sole owner in fee simple of approximately one hundred seventy five acres of certain real property in Pitkin County, Colorado, more particularly described in the attached Exhibit A and incorporated herein by this reference (the "Property"), commonly known as the North Star Preserve.

B. The Property possesses natural, scenic, habitat, wildlife, recreational and open space values (collectively, "Conservation Values") of great importance to Grantor, Grantee, the People of Pitkin County and the people of the State of Colorado, which are worthy of protection all as more particularly specified in the North Star Nature Preserve 2000 Resource Management Plan, adopted by the Grantor on July 26, 2000 (the "Management Plan" (Exhibit B)), which is incorporated herein and is on file at the offices of the Grantee.

C. The specific Conservation Values of the Property have been documented in the Management Plan, which includes reports, maps, photographs, and other documentation that the parties agree provides, collectively, an accurate representation of the Property at the time of this grant and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant. It is anticipated that the Conservation Values may change as the Property is enhanced and restored, and that such changes will be reflected in amendments to the Management Plan.

D. Grantor intends that the Conservation Values of the Property be preserved and maintained forever through consistent land use patterns including, without limitation, those uses existing at the time of this Easement grant which do not significantly impair or interfere with those values. It is the intention of the parties that the Management Plan may be modified in the future as necessary to preserve the ecology and biological diversity of the Property as described in the Management Plan, including modifications that are more restrictive in terms of public use than the uses permitted in the Management Plan, but that the permitted uses shall be limited to the types and levels of use set forth in the Management Plan and specifically incorporated below.

E. Grantor further intends to convey to Grantee the right to preserve and protect the Conservation Values of the Property in perpetuity.

F. Grantor, Pitkin County, is a political subdivision of the State of Colorado.

G. ~~Grantee~~ agrees to honor the Grantor's stated intentions and to preserve and protect in perpetuity the Conservation Values of the Property for the benefit of this generation and the generations to come.

Agreement

IN CONSIDERATION of the mutual covenants, terms, conditions, and restrictions contained in this



Easement and pursuant to the laws of the State of Colorado, in particular C.R.S. § 38-30.5-101, *et seq.*, Grantor voluntarily grants and conveys to Grantee, its successors and assigns, a Conservation Easement in perpetuity over the Property of the nature, character and extent set forth below ("Easement").

1. Purpose. It is the essential purpose of this Conservation Easement to preserve and protect, in perpetuity, the natural, ecological, wildlife habitat, scenic, open space, recreational and aesthetic features and values of the Property. In furtherance of the forgoing, this Conservation Easement is intended to establish permitted uses of the Property which are consistent with the purposes of the Conservation Easement and to prevent any use of the Property that will significantly impair or interfere with the Conservation Values of the Property. Grantor intends that this Easement will confine the use of the Property to those activities consistent with the purpose of this Easement.

2. Rights and Obligations of Grantee. To accomplish the purpose of this Easement, the following rights are conveyed by Grantor to Grantee:

a. To preserve and protect, or to compel Grantor to preserve and protect in perpetuity the Conservation Values of the Property, and in the event of their degradation, to compel the restoration of the Conservation Values. In the event such restoration is required, the standard of such restoration shall be to restore, to the greatest extent possible, the features constituting the Conservation Values to the same condition in which they existed prior to their material degradation or destruction.

b. To enter upon the Property to monitor at reasonable times to inspect the property and monitor the Grantor's compliance with and otherwise enforce the terms of this Easement; and as may be reasonably necessary to exercise the rights granted in this Conservation Easement and to enforce its terms.

c. To prevent or compel the Grantor to prevent any activity or use of the Property inconsistent with the purpose of this Easement or that may reasonably expected to have a material adverse effect on the conservation values, and to require the restoration by Grantor or other responsible party of any damaged areas or features of the Property resulting from any inconsistent activity or use.

d. To recommend modifications to the Management Plan for the Property to accommodate Grantor's permitted uses as well as provide for measures to enhance or protect the habitat, stream, wetlands or riparian viability or other natural features of the Property, and to veto any future change in the Management Plan which would allow for a level of use that may threaten the Conservation Values of the Property.

e. To place signs on the Property, at Grantor's expense, visible to the public at the wildlife viewing platform identified in the Management Plan, identifying Grantee and its role in conserving the Property. Such signs shall be designed by Grantee and presented to Grantor for approval of design and size, which approval shall not be unreasonably withheld or delayed.

3. Baseline Documentation. A collection of baseline data on the Conservation Values of the Property and its resources (the "Baseline Documentation") has been included in sections 1.02, 1.03, 1.04 and 1.05 of the Management Plan. The data and explanatory text, photographs and maps to be assembled in the Baseline Documentation shall be deemed to provide an accurate representation of the condition of the Property at the time of this grant, and the parties acknowledge that the Baseline Documentation will serve as an objective information baseline for monitoring compliance with the terms of this Conservation Easement.

The parties agree that in the event that a controversy arises with respect to the nature and extent of the biological or physical condition of the Property, the parties shall not be foreclosed from utilizing all other relevant or material documents, surveys, reports, and other information to assist in the resolution of the controversy in addition to the Baseline Documentation.

4. Prohibited Uses. Any activity or use of the Property inconsistent with the purpose of this



Easement is prohibited; provided that nothing contained herein shall prevent Grantor from engaging in any activity on the Property reasonably required under the environmental laws, whether federal, state or local, including but not limited to laws governing the regulation and remediation of environmental contaminants, toxic materials or hazardous wastes. Without limiting this general prohibition, the following activities and uses are expressly prohibited as indicated:

- a. New Structures and Improvements. Construction and placement of new buildings and other structures not specifically permitted in this Easement.
- b. Subdivision. Any division or subdivision of title to the Property, whether by physical or legal process.
- c. Paving and Road and Trail Construction. The construction of any road on the Property or the covering of any portion of the Property with concrete, asphalt, or any other paving material without the advance written permission of the Grantee, and only if Grantee determines that the proposed paving, construction, or location of any road or trail will not substantially diminish or impair the Conservation Values of the Property or is not otherwise inconsistent with this Easement. This prohibition does not apply to the existing East of Aspen Trail.
- d. Commercial or Industrial Activity. All commercial or industrial uses of the Property are prohibited, except as specifically permitted in the Management Plan..
- e. Public Use. Public use of the entire Property area west of the Roaring Fork River is prohibited, except for authorized Pitkin County personnel, volunteers, or others conducting research, monitoring or management authorized by Grantor. Public use of the Property area east of the Roaring Fork River, whether commercial or recreational, is prohibited except as specifically permitted in the Management Plan.
- f. Mining. The surface or subsurface exploration, mining or extraction of soil, sand, gravel, rock, oil, natural gas, coal, fuel or any other mineral substance on or below the Property is prohibited.
- g. Topographical Changes. No excavating, grading, cut and fill, berming or other similar material topographical changes shall occur on the Property, except as reasonably necessary in connection with the construction, enlargement, or reconstruction of improvements and roads permitted hereunder, or necessary for streambank restoration; provided however, that the Grantor may, with the prior written approval of Grantee make such other topographical changes as are consistent with and reasonably necessary to preserve and protect the Conservation Values of the Property or to carry out the Management Plan.
- h. Signs and Billboards. Subject to the provisions of paragraph 2(e) above, no commercial signs, billboards, awnings, or advertisements shall be displayed or placed on the Property.
- i. Vegetation. The removal, destruction, spraying or cutting of native vegetation or timber, except as permitted in this Conservation Easement. Trees may be cut to control insects and disease, to control invasive non-native species, and to prevent personal injury and property damage. Dead trees may also be cut for firewood and other uses on the Property. Commercial timber harvesting on the Property shall be prohibited.
- j. Trash. The dumping or other disposal of refuse, garbage, or other unsightly or offensive material. There shall be no outside storage of any trash or garbage on the Property, unless it is contained within individual bear-proof containers which meet North American Bear Society, Colorado Division of Wildlife, or United States National Park Services specifications. The dumping or uncontained accumulation of any kind of trash or refuse on the Property is prohibited. Grantor shall promptly remove any trash or refuse from the Property.



k. Hazardous Materials. The storage, dumping or other disposal of toxic and/or hazardous materials or of non-compostable refuse on the Property is prohibited. Notwithstanding anything in this Easement to the contrary, this prohibition does not make Grantee an owner of the Property, nor does it permit Grantee to control any use of the Property by the Grantor which may result in the storage, dumping or disposal of hazardous or toxic materials; provided, however, that Grantee may bring an action to protect the Conservation Values of the Property, as described in this Easement. (This prohibition does not impose liability on Grantee, nor shall Grantee be construed as having liability as a "responsible party" under CERCLA or similar federal or state statutes.)

l. Utilities. Except as allowed under existing utility easements, or under any additional utility easements that may be taken pursuant to an exercise of eminent domain, no new utility transmission lines shall be constructed or allowed on the Property.

m. Water Pollution. The material degradation or pollution of any surface or sub-surface water on the Property is prohibited.

n. Drainage. The draining of any surface or subsurface water on the Property, except for the diversion of water associated with an established legal water right, and in emergency situations, is prohibited.

o. Non-Native Species. The introduction of non-native plant or animal species is prohibited. No dogs shall be allowed to roam on the Property, except upon the East of Aspen Trail, as provided in the Management Plan.

p. Motorized Vehicles. No motorized vehicles, including recreational vehicles such as motorcycles and off-road vehicles shall be permitted for use anywhere on the Property, except for authorized vehicles used in furtherance of the Management Plan consistent with the Conservation Values and except in emergency situations.

q. Water Rights. Grantor shall retain and reserve the right to use water rights sufficient to maintain and improve the Conservation Values of the Property, and shall not transfer, encumber, lease, sell or otherwise separate water rights necessary and sufficient to maintain and improve the Conservation Values of the Property from title to the Property itself.

r. Lighting. No lighting shall be installed on the Property.

s. Other Prohibited Uses. Any other uses prohibited by the Management Plan, as it may be amended from time to time.

5. Reserved Rights and Permitted Uses. Grantor reserves to itself, its successors and assigns, all rights accruing from ownership of the Property, including the right to engage in or to permit or invite others to engage in all uses of the Property not inconsistent with the purposes of this Easement. Grantor expressly reserves the right to engage in, or allow the public to engage in the following permitted uses, but only to the extent that they do not interfere with the purposes of this Easement and subject to the prohibitions above and any limitations in the Management Plan, as it may be amended from time to time:

- a. preservation and/or restoration of the ecological communities on the Property.
- b. Construction and maintenance of fences necessary for the reasonable and customary management of wildlife, recreation uses, or for separation of uses. Any existing fences may be removed or repaired. Any new fencing shall be of such height and type of construction that is designed to prevent interference with wildlife in accordance with Colorado Division of Wildlife standards;
- c. any necessary or required remediation;



d. any emergency activity necessitated by virtue of fire, flood, act of God or other element or cause beyond the control of Grantor.

e. The following improvements are permitted:

1. Improvements and maintenance for the East of Aspen trail
2. Interpretive displays and signs and boardwalks along the access corridors
3. An ADA compliant viewing stand with interpretive signs at the existing parking lot in the location shown on Exhibit A.
4. Improvements and maintenance of existing parking areas as depicted on Exhibit A.
5. Interpretive signs and signs displaying regulations along the East of Aspen Trail and along property boundaries
6. Gates to regulate access
7. River bed and river bank stabilization and restoration to reduce erosion and promote fish habitat.

f. Any use specifically permitted in the Management Plan, as it may be amended from time to time.

6. Notice of Intention to Undertake Permitted Actions. Except with respect to emergency activities, the recreational and commercial public uses permitted, and other activities specifically described in the Management Plan, Grantor shall notify Grantee prior to undertaking permitted activities to afford Grantee an opportunity to ensure that the activities are carried out in a manner consistent with the purposes of this Easement. Whenever notice is required, Grantor shall notify Grantee in writing not less than thirty (30) days prior to the date Grantor intends to undertake the activity. Notice shall describe the nature, scope, design, location, timetable, and any other information material to the proposed activity in sufficient detail to permit Grantee to make an informed judgment of its consistency with the purposes of this Easement. The parties may satisfy this notice requirement in full or in part in their Management Plan. Notices shall be sent by registered or certified mail to the addresses set forth below, or such other address as the parties designate in writing.

7. Grantee's Approval. Where Grantee's approval is required, Grantee must grant approval or withhold approval in writing within thirty (30) days of receipt of Grantor's written request. Grantee's approval may be withheld only upon a reasonable determination that the action as proposed would be inconsistent with the purposes of this Easement. Any written denial of approval to undertake an activity shall specifically describe the reasons such approval is withheld, including a specific listing of the purposes of this Easement with which the proposed activity is inconsistent.

8. Management Plan. The Property shall be operated and managed by Grantor in accordance with the Management Plan. The Management Plan shall be updated by Grantor no less than once every five(5) years. As further provided in paragraph 2(d), Grantee may participate in any North Star Users Group meetings and may recommend changes to the Management Plan. No amendments or changes to the Management Plan may increase the type or intensity of recreational, commercial, or public use beyond what is specified in the existing Management Plan.

9. Enforcement. Grantee shall have the right to prevent or correct or require Grantor to prevent or correct of violations of the terms and purposes of this Easement. Grantee may enter and inspect the Property for violations. If Grantee finds what it believes is a violation, Grantee shall immediately notify Grantor in writing of the nature of the alleged violation. Upon receipt of this written notice, Grantor must either (a) restore the Property to its condition that existed prior to the violation, or (b) provide Grantee a written explanation of the reason the alleged violation should be permitted or is not a violation of this Easement. If the Grantor offers justification for permitting the alleged violation or alleges that no violation exists, all parties agree to meet as soon as possible to resolve this difference. If a resolution cannot be achieved at the meeting, both parties agree to meet with a mutually acceptable mediator to attempt resolution. When Grantee determines an ongoing or imminent violation could irreversibly



diminish or impair the Conservation Values of the Property, Grantee may, at its discretion, take appropriate legal action. Grantor must discontinue any activity constituting the alleged violation during the mediation process. Should mediation fail to resolve the dispute to the satisfaction of the parties, either party may, at its discretion, take appropriate legal action. When a violation is imminent, exists, or has occurred, Grantee may request a temporary or permanent injunction. A court may also issue an injunction to require Grantor to restore the Property to its condition prior to the violation.

10. Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantor, including, without limitation, costs of suit and attorneys' fees, and any costs of restoration necessitated by Grantor's violation of the terms of this Easement shall be borne by Grantor, unless Grantee's enforcement action is determined to be frivolous or unreasonable.

11. Grantee's Discretion. Enforcement of the terms of this Easement shall be at the discretion of Grantee. Any forbearance by Grantee to exercise its rights in the event of a breach of this Easement shall not be deemed or construed to be a waiver by Grantee of the breach or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. Grantee's delay or omission in exercising any right or remedy upon Grantor's breach shall not impair any right or remedy or be construed as a waiver.

12. Statute of Limitations. The parties agree that the statute of limitations applicable to contract shall apply to any proceeding to enforce this Conservation Easement. Grantor hereby specifically waives any defense available to Grantor pursuant to C.R.S. § 38-41-119 and the defenses of laches, estoppel, and prescription.

13. Acts Beyond Grantor's Control. No event shall be construed to entitle Grantee to bring any action against Grantor for injury to or change in the Property resulting from causes beyond Grantor's control, including, without limitation, fire, flood, riverbank erosion, storm, drought, earth or underground water movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

14. Access. The Grantor specifically reserves the right to close or limit access to the Property in the interest of the public health, safety and welfare or to protect the Conservation Values.

15. Costs and Liabilities. Except as expressly provided herein, Grantor, its successors and assigns, shall retain all responsibility and shall bear all costs and liabilities of any kind incident to ownership of the Property. Grantor or Grantee, as applicable, shall keep the Property free from any mechanics liens related to work performed on behalf of such party. The parties acknowledge that Grantor shall be solely responsible for the maintenance, repair and replacement of all trails and related improvements existing upon the Property or placed on the Property in the future by Grantor, if any, and shall maintain liability insurance coverage related to such trails and improvements.

Grantor agrees to carry or to require its agents, consultants and contractors who conduct any activity on the Property to carry not less than \$51,000,000.00 comprehensive general liability insurance. The Grantee shall be named as an additional insured under such liability policy. Grantor shall be responsible for (1) the negligent actions of its officials, employees and agents in the performance or failure to perform incident to this Easement, and (2) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause unless due to the negligence or willful action or inaction of the Grantee; provided, however, that nothing in this Easement shall be construed to be a waiver or Grantor's immunity under the Colorado Governmental Immunity Act.

_____ To the extent allowed by law, Grantor shall hold harmless, indemnify and defend Grantee and its volunteer citizen board members, employees, agents and the heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from and against all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, suits, proceedings, demands or judgments, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property,



regardless of cause, unless due solely or in part to the negligence of any of the Indemnified Parties; (2) the presence or release of hazardous or toxic substances on, under or about the Property, unless such release was caused by an Indemnified Party. For the purpose of this paragraph, hazardous or toxic substances shall mean any hazardous or toxic substance which is regulated under any federal, state or local law.

Nothing in this Conservation Easement shall be construed as giving rise to any right or ability of the Grantee to exercise physical or managerial control of the day to day operations of the Property, or of any of the Grantor's activities on the Property, or otherwise become an operator with respect to the Property within the meaning of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, or any other federal, state, or local law or regulation making operators of property responsible for remediation of contamination. Grantor acknowledges that this Conservation Easement shall not make Grantee an owner or responsible party in regard to the Property pursuant to such laws.

16. Taxes. Grantor, its successors and assigns, shall timely pay all taxes, assessments, fees and charges of whatever description levied on or assessed against the Property by competent authority (collectively "Taxes") and shall furnish Grantee with satisfactory evidence of such payment on request.

17. Noxious Weeds. Grantor, its successors and assigns, shall comply with the Colorado Noxious Weeds Act (hereinafter "Act"), C.R.S. § 35-5.5-101 as the same now exists or may be amended from time to time, in connection with the Property.

18. Amendment. The fact that any use of the Property that is expressly prohibited by this Conservation Easement, or any other use as determined to be inconsistent with the purpose of this Easement may become greatly more economically valuable than consistent uses allowed by this Easement, or that neighboring properties may in the future be put entirely to uses that are not permitted hereunder, has been considered by the Grantor in granting this Conservation Easement. It is Grantor's belief that any such changes will increase the benefit to the public of the continuation of this Conservation Easement, and it is the intent of both Grantor and Grantee that any such changes should not be assumed to be circumstances justifying the termination, extinguishment or automatic amendment of this Conservation Easement.

Notwithstanding the foregoing, however, Grantor and Grantee recognize that circumstances may arise under which an amendment to or modification of this Conservation Easement would be appropriate to promote the purposes of this Easement and to protect the conservation values, including but not limited to Grantee at any time in the future becoming unable to sufficiently provide monitoring and other tasks as contemplated herein, due to financial reasons or otherwise. Accordingly, Grantor and Grantee may jointly amend this Conservation Easement, provided that no amendment shall be allowed that will affect the qualification of this Conservation Easement under § 38-30.5-101, *et seq.*, C.R.S., nor its qualification as a conservation easement for purposes of the Internal Revenue Code, and any amendment shall be consistent with the purposes and Conservation Values of this Conservation Easement, and shall not affect its perpetual duration, effect or allow a subdivision of the Property or allow development of the Property inconsistent with the Management Plan. Any such amendment shall be in writing, signed by both parties and recorded in the official records of Pitkin County, Colorado. Although this paragraph recognizes that an amendment to this Conservation Easement may be appropriate in certain circumstances, the terms of this paragraph do not create an obligation on the part of either Grantor or Grantee to agree to an amendment requested by another party.

19. Extinguishment. If the purpose of this Easement becomes impossible to accomplish, this Easement can only be wholly or partially terminated or extinguished by judicial proceedings in a court of competent jurisdiction. Each party shall promptly notify the other when it first learns of such circumstances.

20. Grantee's Assignment. This Easement is transferable, with the consent of Grantor, which shall not be unreasonably withheld. Grantee may only assign its rights and obligations under this Easement to an organization that is (a) a qualified organization at the time of transfer under Section 170(h) of the Internal Revenue Code of 1986, as amended (or any successor provision then applicable), and the applicable regulations promulgated thereunder, and (b) authorized to acquire and hold conservation easements under Colorado law, particularly C.R.S. § 38-30.5-



101, *et seq.* As a condition of transfer, Grantee must ensure that the conservation purposes of this Easement continue to be carried out by the transferee and that the successor grantee has the financial ability to carry out the purposes hereof. Grantee shall provide Grantor sixty days advance notice of its desire to transfer this Easement, such notice to include the name of the proposed successor grantee and its financial ability to carry out the purposes of this Easement. Grantors consent to such transfer shall be deemed to be satisfaction by Grantee of its obligation to ensure continuance of the purposes of the Conservation Easement by, and the financial ability of, its successor or grantee.

21. Subsequent Grantor Transfers. Grantor agrees to incorporate the terms of this Easement into any deed or other legal instrument by which it divests itself of any interest in the Property, including without limitation, a leasehold interest. Grantor further agrees to give written notice to Grantee of the transfer of any interest at least thirty (30) days prior to the date of the transfer. Grantor's failure to perform any act required by this paragraph will not impair the validity of this Easement or limit its enforceability in any way.

22. Condemnation. In the event of condemnation of all or any portion of the Property, any condemnation award shall go solely to Grantor.

23. Notices. Any notice, demand, request, consent, approval or communication contemplated by this Easement shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor: Pitkin County Open Space Director
530 East Main
Aspen, CO 81611

To Grantee: Aspen Valley Land Trust
320 Main Street Suite 204
Carbondale, CO 81623

or to other addresses as the parties may designate by written notice to the other.

24. Recordation. This instrument shall be recorded in the records of the Pitkin County, Colorado, Clerk and Recorder. Grantee may re-record it at any time as may be required to preserve its rights in this Easement.

25. General Provisions.

a. Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of Colorado.

b. Liberal Construction. This Easement shall be liberally construed to effect the purpose of the Easement and the policy and purpose of C.R.S. § 38-30.5-101, *et seq.* If any provision in this Deed of Conservation Easement is found to be ambiguous, an interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

c. Severability. If any provision of this Easement, or its application to any person or circumstance is found to be invalid, the remaining provisions of this Easement, or its application to other persons or circumstances shall not be affected.

d. Entire Agreement. This Deed of Conservation Easement sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Easement, all of which are merged in this Easement.

e. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of



Grantor's title in any respect.

f. Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of, the parties and their respective successors and assigns. This Easement shall continue as a servitude running in perpetuity with the Property.

g. Termination of Rights and Obligations. A party's rights and obligations under this Easement terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

h. Captions. The captions in this Deed of Conservation Easement have been inserted solely for convenience of reference, are not a part of the Easement and have no effect upon its construction or interpretation.

i. Amendment. Should an amendment to or modification of this Easement become appropriate, Grantor and Grantees are free to jointly amend this document. Any amendment must be written, signed by Grantee and Grantor or their successors or assigns, and recorded in the records of the Pitkin County Clerk and Recorder.

TO HAVE AND TO HOLD by Grantees its successors, and assigns forever. Grantor and Grantee have executed this Deed of Conservation Easement on the day and year written above.

FOR THE GRANTOR:

Date: 7-3-02

ATTEST:

Jeanette Jones
Jeanette Jones
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS
OF PITKIN COUNTY, COLORADO

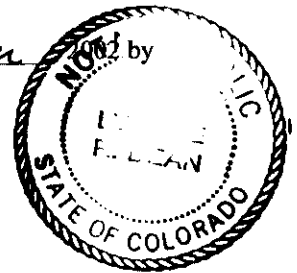
Patti Kay-Clapper
Patti Kay-Clapper, Chairperson
Date: 09-03-02

STATE OF COLORADO)
) ss.
COUNTY OF PITKIN)

The foregoing instrument was acknowledged before me this 3RD day of September 2002 by Patti-Kay Clapper, the Chairperson of the Pitkin County Board of County Commissioners.

Witness my hand and official seal.
My commission expires: 12-01-2005

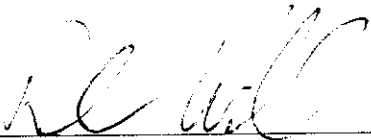
Notary Public - Sydney R. Dean



APPROVED AS TO FORM:

John Ely
John Ely
County Attorney

Hilary Smith
Hilary Smith
County Manager



Dale Will, Director
Open Space and Trails Program

GRANTEE
Aspen Valley Land Trust, a Colorado not-for-profit corporation

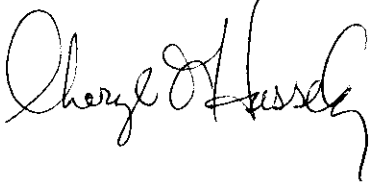


Martha Cochran, Executive Director
Aspen Valley Land Trust

STATE OF Colorado)
) ss.
COUNTY OF Garfield)

The foregoing instrument was acknowledged before me this 9th day of August, 2002 by Martha Cochran, the Executive Director of the Aspen Valley Land Trust.

Witness my hand and official seal
My commission expires



MY COMMISSION EXPIRES:
OCTOBER 27, 2004



SILVIA DAVIS PITKIN COUNTY CO R 0.00 D 0.00

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EXHIBIT A

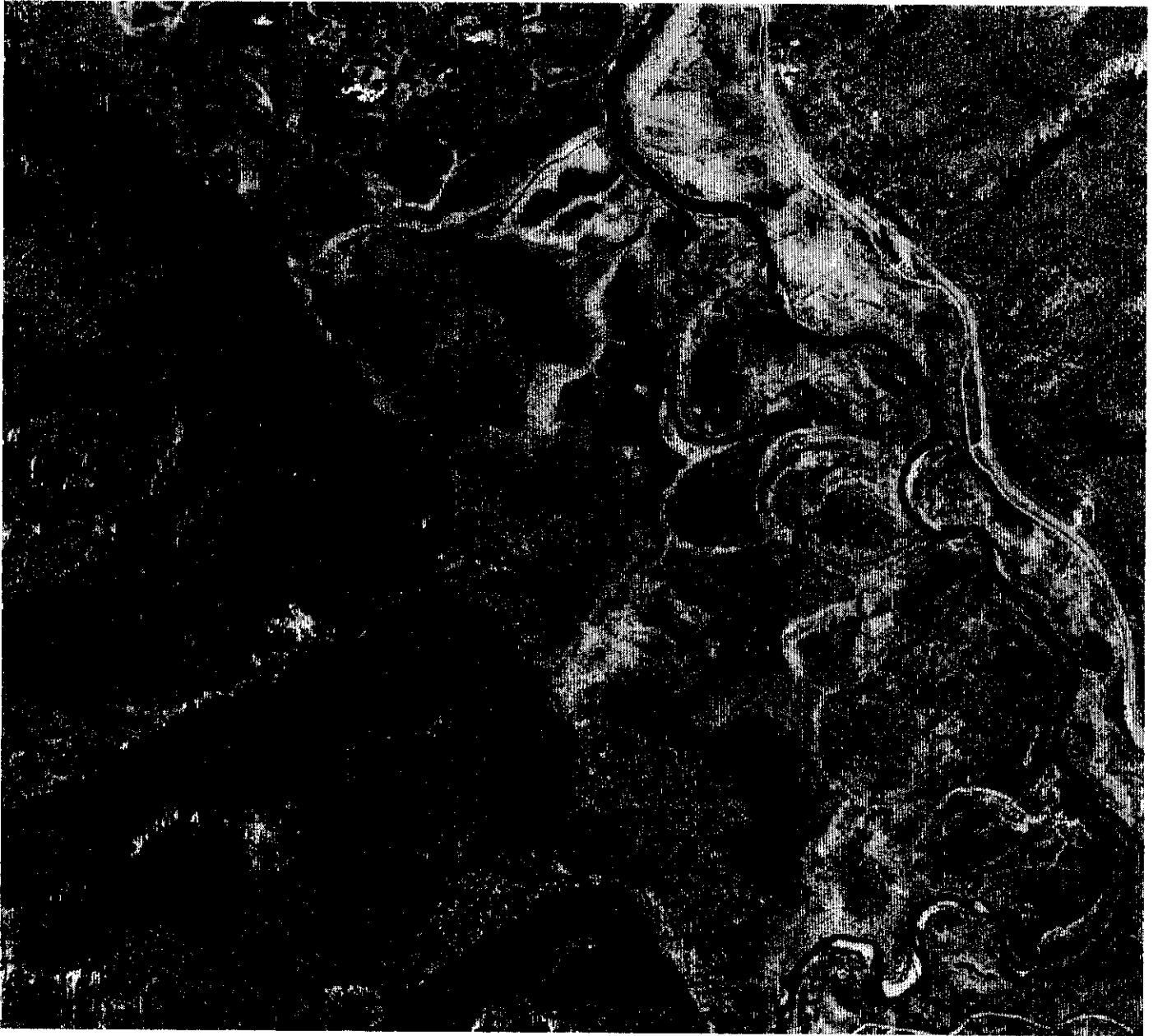
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SILVIA DAVIS PITKIN COUNTY CO

Lots 9, 10, 11 and 16, and part of Lots 1, 2, 3, 4, 5, 12, 15, 18, 19, 20 and 28 in Section 20; and part of Lots 12 and 13 in Section 17, Township 10 South, Range 84 West of the 6th Principal Meridian, all being described as follows:

Beginning at a point on the Westerly right of way line of Colorado Highway No. 82 whence the Southwest corner of said Section 17 bears South 61°28'53" West 2118.63 feet;
thence 9.56 feet along said westerly right of way and the arc of a curve to the right having a radius of 543.00 feet, the chord of which bears South 48°12'16" East 9.56 feet;
thence South 47°42'00" East 301.50 feet along said R.O.W.;
thence 221.60 feet along said R.O.W. and the arc of a curve to the right having a radius of 256.50 feet;
thence South 01°48'00" West 124.90 feet along said R.O.W.;
thence 241.36 feet along said R.O.W. and the arc of a curve to the left having a radius of 603.00 feet;
thence South 21°08'00" East 120.10 feet along said R.O.W.;
thence 335.03 feet along said R.O.W. and the arc of a curve to the left having a radius of 603.00 feet;
thence South 52°58'00" East 611.00 feet along said R.O.W.;
thence 199.14 feet along said R.O.W. and the arc of a curve to the right having a radius of 256.50 feet;
thence South 08°29'00" East 501.40 feet along said R.O.W.;
thence 280.53 feet along said R.O.W. and the arc of a curve to the left having a radius of 316.50 feet;
thence South 59°16'00" East 144.50 feet along said R.O.W.;
thence 316.85 feet along said R.O.W. and the arc of a curve to the right having a radius of 543.00 feet;
thence South 25°50'00" East 190.10 feet along said R.O.W.;
thence 281.31 feet along said R.O.W. and the arc of a curve to the right having a radius of 543.00 feet;
thence South 03°51'00" East 5.60 feet along said R.O.W.;
thence 85.42 feet along said R.O.W. and the arc of a curve to the left having a radius of 412.00 feet, the chord of which bears South 02°05'21" East 85.26 feet;
thence departing said R.O.W. South 41°30'06" West 406.77 feet;
thence South 43°46'05" West 69.24 feet;
thence South 71°00'33" West 1506.59 feet;
thence South 87°59'50" West 516.99 feet to the point of intersection with the westerly boundary line of Lot 28 said section 20;
thence North 00°01'08" West 382.70 feet along said Westerly boundary line and the Westerly Boundary of Lot 18;
thence South 89°58'45" West 201.30 feet along the Southerly boundary line of Lot 10 said section 20;
thence North 00°01'02" East 1104.94 feet along the Westerly boundary line of said Lot 10;
thence South 89°59'40" West 1119.14 feet along the Southerly boundary line of Lot 9 said Section 20;
thence North 00°00'24" East 872.07 feet along the Westerly boundaries of Lot 9 and Lot 5 said Section 20;
thence North 58°18'06" East 987.24 feet;
thence North 11°36'32" West 215.67 feet;
thence North 31°10'32" East 851.60 feet to the point of beginning.

County of Pitkin, State of Colorado.

EXHIBIT B



North Star Nature Preserve

2000 Resource Management Plan

Adopted by Pitkin County Commissioners July 26, 2000

Shellie Roy Harper, Chair



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NORTH STAR NATURE PRESERVE 2000 RESOURCE MANAGEMENT PLAN

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SECTION I



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Land Ethic

The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land.

This sounds simple: do we not already sing our love for and obligation to the land of the free and the home of the brave? Yes, but just what and whom do we love? Certainly not the soil, which we are sending helter-skelter downriver. Certainly not the waters, which we assume have no function except to turn turbines, float barges, and carry off sewage. Certainly not the plants, of which we exterminate whole communities without batting an eye. Certainly not the animals, of which we have already extirpated many of the largest and most beautiful species. A land ethic of course cannot prevent the alteration management, and use of these 'resources,' but it does affirm their right to continued existence, and, at least in spots, their continued existence in a natural state. Leopold, Aldo: A Sand County Almanac, and Sketches Here and There, 1948, Oxford University Press, New York, 1987, pg. 204.

1.01 FOREWORD

The North Star Nature Preserve is a unique and valuable tract of open space in Pitkin County where development and recreation pressures threaten the integrity of the natural environment. Although the original intent for the acquisition of North Star was for both passive recreation and wildlife habitat protection¹, public lands available for recreation are quite abundant in the Roaring Fork Valley whereas elk migration corridors and other critical wildlife habitats protected at North Star are being lost at an unprecedented rate.

This plan is the product of many BOCC meetings and the undaunted efforts of the North Star Users Group who worked diligently over the 6 months preceding the adoption of this plan. Although the members of the Users Group came into the User Group meetings with a variety of opinions and special interests, we found that there were far more topics of agreement than dissent.

The intent of this plan is to provide a basis for the long term management of the North Star Nature Preserve that balances protection of the ecosystem processes that support the biological diversity within the Preserve with compatible recreational and educational uses.

1.01.01 Background

In 1966, the *Aspen Area General Plan* was adopted allowing construction of up to 1500 houses on the North Star Ranch plus some recreational and commercial development.. Development of this magnitude was rejected by the landowner, James Smith, who, in 1973, submitted an application for a 350 residence PUD. This application was denied by the Pitkin County BOCC in its initial form and had not been resubmitted when, in 1974, a general County rezoning took place. Consequently, North Star Ranch was rezoned to AF-1 reducing the development potential of the property to 36 units. The primary intent and effect of AF (Agriculture-Forestry) zoning was to reduce building potential to maintain the County's rural

¹ The Pitkin County BOCC Resolution (77-105) exempting North Star Ranch from subdivision, ...the Board, ...has determined that (a) the parcel to be conveyed will be devoted to trail, fishing, picnicking, kayak and like recreation uses as well as wildlife preservation..."

atmosphere. This led to conversations between Mr. Smith and members of the Pitkin County Parks Association (PCPA) concerning the possibility of converting part of the Ranch to Open Space. Negotiations with the PCPA and the Aspen-Pitkin Planning Department led to the selection of a 175 acre parcel within the Ranch and an appraisal of that parcel in 1977. The Planning Department then took the lead in the acquisition process with the application of a 50/50 matching grant of \$575,000 from the Federal Land and Water Conservation Fund, administered through the Colorado Division of Parks and Recreation for the Federal Bureau of Outdoor Recreation. When it was learned that this money would not be available in 1977, The Nature Conservancy (TNC) was contacted.

TNC was familiar with the property and was anxious to assist in the County's acquisition. Jon Mulford, TNC's local representative, renegotiated the purchase price to include a gift valued at \$275,000 from three generations of the Smith family. In November 1977, TNC took title to 175 acres of the North Star Ranch. In December 1978, Pitkin County took title from TNC. In the meantime, a firm promise of Land and Water Conservation funds was made, but the amount had shrunk to \$75,000 leaving the County with the major funding burden, to be born primarily by Payment-in-Lieu-of-Taxes (PILT) monies from the Federal Government. While this brief outline of the acquisition process only touches on a complex series of negotiations, it does serve to illustrate the many pressures and priorities that have been brought to bear on the property. In addition, some consistent concepts were emphasized in most of the communiqués between the participating parties. Letters from Jon Mulford, attorney representing TNC, Bill Kane, Aspen/Pitkin Planning Director, Sydney Macy, TNC Colorado Field Office Director, and James Smith, Owner of The North Star Ranch, emphasized that the driving force behind the transfer of North Star from private to public ownership was the protection of wildlife habitat and open space. In a letter to the Pitkin County Planning and Zoning Commission dated July 18, 1984, Sydney Macy wrote,

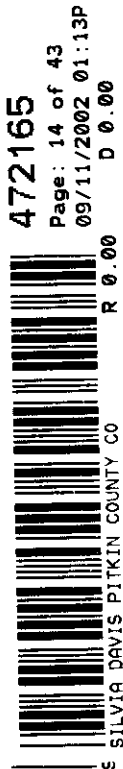
"The intent of the acquisition, which is in keeping with The Nature Conservancy's objective of preserving natural areas, was that North Star Ranch be managed as a natural area for scientific and educational purposes, while still encouraging and allowing some passive recreation".

Bill Kane, in a letter to Colorado Division of Parks and Outdoor Recreation, wrote, "It is our contention that this land, if acquired, would present the prospect of an elk refuge in perpetuity". Additionally, recent correspondence from Morgan Smith, son of James Smith, states that,

"...this donation [the \$275,000 Smith family donation]...was intended to keep the land in open space and for the purposes of wildlife. Whether this is reflected in whatever documents may exist from the time of the donation, we never would have made the donation if there had been discussion of commercial usages [sic]. In addition, it was always our hope that this donation might serve as an example to others who are interested in preserving land and protecting wildlife."

The North Star Nature Preserve is currently designated as Pitkin County Open Space. As such, all rules and regulations specified in Pitkin County Resolution 25-93 apply to North Star. Currently, North Star is being considered by the BOCC for inclusion into the Pitkin County Open Space and Trails Program.

The information herein is largely based on the Design Workshop produced *North Star Nature Preserve Resource Management Plan*, 1989 which in turn was a compilation of previous studies and plans which included: Pitkin County BOCC Resolutions 77-98 and 77-105, 1977;



Environmental Assessment for North Star Ranch Open Space Acquisition Application, 1977; North Star Nature Preserve Master Plan Draft, 1979; Vegetation Inventory, 1981; and The Roaring Fork East Neighborhood Master Plan, 1985. Ecological Monitoring of North Star has been conducted constantly since 1995 by the Aspen Center for Environmental Studies (ACES) North Star Committee and Roaring Fork Watershed Coalition in conjunction with Dr. John Emerick, Colorado School of Mines. This monitoring was funded in large part by Pitkin County. Resulting data provided a strong ecological basis for the strategies within this plan.

1.01.02 The Present

The foundation of this management plan is ecology and conservation biology. The conservation imperative at North Star is to preserve a mosaic of high quality native ecological communities that support a high level of biological diversity. The current composition of the current vegetational mosaic at North Star was largely shaped by human intervention. Future management will instead focus on passive actions that assist the natural ecosystem processes that control the representation of different vegetational communities and hydrological regimes.

North Star Preserve is a unique 175 acre tract of open space land about 1 ½ miles east of Aspen, Colorado. The topography contrasts sharply with regional landforms as the Preserve is a relatively flat bottomland surrounded by the steep mountain slopes of Richmond Hill/Bell Mountain and Smuggler Mountain. The landform is a result of modification during periods of glaciation of the Pleistocene Epoch. A terminal moraine at the north end of the North Star Preserve created a glacial lake which filled with stream deposited materials, before the river broke through the morainal dam. As a result, two soil types are present: Agrols in the bottomlands along the river, and an unnamed peaty loam on alluvial fans at the base of Richmond Hill/Bell Mountain.

North Star's vegetation is influenced by the climate near Aspen which is continental in character and subject to sudden extreme temperature changes. Only June through September are warm enough to foster growth. The Preserve is usually snow covered from November through March.

Until 30 years ago most of the Preserve was dominated by the willow riparian vegetational community (or carr), and occasional islands of cottonwoods and blue spruce. Thereafter it was managed as a ranch for hay and grazing and became pastoral in character. Presently, ten distinct vegetational communities occur at North Star: mixed conifer forest, aspen forest, cottonwood riparian, willow riparian, oak-serviceberry shrubland, dry meadow, mesic hayfields, wet meadow, emergent sedge wetland, and open water (Hickey and Emerick 2000).

In 1977, the land was acquired by the Nature Conservancy and transferred to Pitkin County in 1978. From 1984 until the Spring of 1999, North Star was managed by the Aspen Center for Environmental Studies (ACES) and is now being managed by Pitkin County.

The North Star Nature Preserve is a valuable resource to Pitkin County and the City of Aspen for many reasons, including:

- as a sanctuary for wildlife
- as a public amenity for quiet recreation, including fishing, canoeing, and nature appreciation



- as a visual resource on a scenic highway entering Aspen
- a vital area for clean air and water quality
- as a living classroom for environmental education
- as a deep underground aquifer, the North Star Nature Preserve sustains the health of the Roaring Fork River
- flood abatement in wet years and river recharge in dry years

Intensive economic pressure in and around Aspen has created a strong need to ensure that North Star is maintained as a nature preserve in perpetuity. An additional 60 acres of land have been acquired by ACES but is separated from North Star by private property. Both recreation and residential development threaten the ecological integrity of the Nature Preserve.

The following recommendations have been developed in order to manage the Nature Preserve as a nature sanctuary and public amenity, in the context of the Roaring Fork Valley.

1.02 CONCEPTS

The objectives for managing North Star have evolved through the aims of the Nature Conservancy, the conditions of sale by James H. Smith, Pitkin County, Roaring Fork East Neighborhood Master Plan, and Aspen Center for Environmental Studies. The foundation of this management plan is ecology and conservation biology and the conservation imperative at North Star is to preserve a mosaic of high quality native ecological communities that support a high level of biological diversity. Although the composition of the current vegetational mosaic at North Star was largely dictated by human intervention future management will focus on management actions that assist the natural ecosystem processes that support the representation of North Star's vegetational communities and hydrological regimes.

North Star provides tremendous benefits to both the ecology and the people of the upper Roaring Fork Valley:

1.02.01 ECOLOGY

Ecological studies and inventories conducted at North Star have revealed that North Star supports a high level of biological diversity: 17 species of small mammals (e.g., mice, voles, shrews, squirrels); at least 107 species of birds, more than 60 of which are like to breed at North Star (including 4 U.S. Forest Service Designated "Sensitive" species); 13 medium to large mammals (e.g., elk, coyote, black bear, bobcat); 3 species of amphibian (including the boreal toad which is a U.S. Fish and Wildlife Service Endangered Species Act "Candidate" species); and one reptile species (common garter snake).

Included within the birds are at least 6 species that nest on the ground. These species are especially sensitive to human recreational disturbance and will abandon a nest after repetitive disturbance ((Tremblay and Ellison 1979); (Jeffrey 1987); (Yalden and Yalden 1990); (Hockin et al. 1992); (Watson et al. 1996)). When flushed from a nest by human activity the young or eggs are exposed to weather and are vulnerable to predators such as ravens, raccoons, and foxes. As well, young birds require almost continuous feeding and may become weakened and die if the adults are otherwise occupied. Even if humans are careful, it is easy to step on eggs or chicks. The cryptic eggs of killdeers and vesper sparrows blend in with the surrounding ground or



vegetation. Killdeer nests are little more than a few sticks and stones and are very difficult to see. Nesting ducks will stay away for as long as humans are in close proximity. This can lead to death of the eggs due to excessive cooling or exposure to the sun. More frequently, it leads to nest abandonment or destruction of the nest by magpies or other predators.

Of particular conservation interest at North Star is a Great Blue Heron colony. It is estimated that there are only 63 Great Blue Heron colonies in the entire state of Colorado and the North Star colony is thought to be one of just a few occurring over 8000 feet in elevation and is the only one occurring in blue spruce trees (most occur in cottonwoods). In other words, the North Star Great Blue Heron colony is quite unique and ecologically significant. The presence of this colony has important management implications. Research has resulted in a recommend a minimum 200 meter buffer zone from the periphery of colonies in which no human activity should take place during courtship and nesting seasons ((Vos et al. 1985); (Miller et al. 1998); (Carney and Sydeman 1999)). Because colonies may move every few years, management plans should encompass entire river systems ((Parker 1980)).

If, and it appears likely, boreal toads are federally listed as “Endangered” or “Threatened”, then we will be bound by law to increase the protective status of North Star.

A. Other Key Ecological Concepts

- (1) North Star is a vital link in the Roaring Fork Watershed ecosystem. Plans for the preservation of the health of natural systems in North Star will not be effective unless they are supported throughout the system.
- (2) North Star represents a high quality remnant of minimally disturbed riparian/montane wildlife habitat surrounded by human development that serves to connect landscape elements required by many wildlife species for different life history stages.

a) Significant ecological aspects of North Star as part of a landscape mosaic:

- The Roaring Fork River riparian community and floodplain
- Elk migration corridor
- Elk calving area
- Migratory stop for:
 - neotropical song birds (e.g., Wilson’s warbler, American pipit)
 - resident mammals that migrate elevationally (e.g., coyote, black bear, mule deer)
 - waterfowl (e.g., gadwall, ring-necked duck)
- Breeding site for:
 - resident birds that migrate elevationally (e.g., fox sparrow, song sparrow)
 - neotropical migrant song birds, wading birds, and waterfowl (e.g., yellow warbler, warbling vireo, spotted sandpiper, mallard)
 - medium to large mammals (e.g., coyote, black bear, red fox, short-tailed weasel, American marten)
 - raptors (e.g., red-tailed hawk, northern goshawk)
 - great blue heron
- Habitat and potential breeding habitat for State Endangered and Federal Category I (warranted but precluded) Candidate endangered boreal toad (*Bufo boreas boreas*)
- Spawning site for wild trout

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- Breeding habitat for approximately 14 species of small mammals (e.g., montane shrew, meadow vole, brush mouse)
- Supports 3 rare vegetational communities considered to be vulnerable through their range or found locally in a restricted range ((Spackman et al. 1999)):
 - Water Sedge-Beaked Sedge (*Carex aquatilis-Carex utriculata*) montane sedge wetland
 - Geyer's Willow-Montane Willow (*Salix gereriana-Salix monticola*) montane willow carr
 - Drummond's Willow-Beaked Sedge (*Salix drummondiana-Carex utriculata*) montane willow carr

1.02.02 PEOPLE

North Star provides many benefits to both visitors and residents of the Roaring Fork Valley which include the following:

- Chemical and physical filtering of surface runoff resulting in a cleaner, more productive river for both wildlife and people
- Opportunity for solitude immediately adjacent to population center
- Opportunity to observe wildlife in natural setting immediately adjacent to population center
- Opportunity for quiet recreational activities (e.g., fishing, bird watching, kayaking, meditation)
- Opportunity to serve as living classroom for environmental education and research

1.03 ECOLOGICAL COMMUNITIES

1.03.01 The Roaring Fork River

The Roaring Fork River meanders through the meadows of North Star, constantly changing and rejuvenating the ecological communities it has helped to create. The river here is a wide valley bottom stream with a sand, gravel, and paleo-peat substrate. The river has meandered back and forth across the valley floor over time creating a system of old river channels and oxbow lakes that are at different stages of eutrophication (i.e., enrichment of water by nutrients resulting in increased vegetational growth). This results in a productive complex of permanent and ephemeral ponds, sedge and sedge-willow dominated marshes, and wet meadows.

Sedge and sedge-willow marsh occupies areas with a high water table totaling approximately 35 acres. A four acre area of wet meadow occurs in areas that flood only early in the growing season. Together these wetlands play an important role in absorbing the impact of spring flooding and help assure Roaring Fork River water quality by filtering out silt and contaminants.

The treatment of riparian habitats in the past and their current condition is alarming. For example, it has been estimated that in the Rocky Mountain-Great Plains region, 90-95% of the cottonwood-willow riparian ecological community have been lost to development and agriculture. In the American West, these communities support a disproportionately greater number of wildlife than their upland counterparts. In fact, although less than 1% of the land in



Colorado is riparian over 60% of the vertebrates are obligates to riparian ecosystems and approximately 85% **require** riparian habitat for some aspect of their life history (Ohmart and Anderson 1986).

Rainbow trout in the river at North Star are small and less abundant than in other parts of the River, probably due to the granitic nature of the simple sandy river bottom and lack of coarse woody debris for hiding and thermal cover. Other, smaller fish species also thrive in the spring fed ponds but have yet to be identified. Beavers have built a bank lodge and runway on the west side of the river towards the south end of North Star. Waterfowl and songbirds abound along the river edges and in the sedge-willow marshes. The ephemeral ponds provide optimal habitat for western chorus frogs that in turn are prey for great blue herons. The permanent oxbow and spring-fed ponds provide both migratory and breeding habitat for various duck species as well as Canada geese. The wet meadows are host to a plethora of small mammal species. American dippers, spotted sandpipers, and muskrats all make the river and its shores their home.

Spring flood events have been restoring the meanders to the Roaring Fork River at North Star. Alternating banks are either sites of erosion or deposition. This is a natural process and is important to the ecology of a riverine system in that it creates a diversity of habitats and allows the river to access its flood plain. The beaches that develop as a result of this activity are critical to regeneration of willows and cottonwoods and are very sensitive to disturbance. People walking, picnicking, or beaching canoes and kayaks trample seedlings and reduce cottonwood, willow, and sedge regeneration. Anglers also have a direct negative impact by denuding vegetation along the river's edge, causing banks to slough into the river, and increasing erosion. Consequently, it is important that visitors are made aware of these impacts and encouraged to tread lightly.

Another issue of concern is that releases from Grizzly Reservoir at the headwaters of Lincoln Creek are too late in the season and not gradual enough resulting in erosion processes that are damaging the morphology and ecology of the upper and middle Roaring Fork including North Star.

The river is a major attraction to people. As it flows through the Nature Preserve, it offers a quiet meditative place, a couple of sandy beaches, limited canoeing and kayaking, catch and release fishing, and nature viewing and education.

A. Management Actions

- (1) The river will be managed to maintain semi-natural flood regimes and promote wildlife habitat. Periodic flooding of the Roaring Fork River is perhaps the most important ecological process in restoring North Star to its pre-agricultural condition. Bank stabilization will NOT be a management objective for the Roaring Fork within North Star. Rather, the intention is to promote river processes that result in meanders, oxbows, and a functional floodplain.
 - a) Various willow species, thinleaf alder, river birch, and narrowleaf cottonwoods will be planted along the river and in the wet meadows to increase structural diversity of riparian habitat
 - (i) This will be accomplished using both native plant materials collected on site and purchased native plant materials



- (ii) Planted native vegetation will serve as natural barriers to prevent abuse of sensitive habitat areas
- (iii) Woody materials may be added to the river to increase fish habitat complexity
 - (a) Colorado Division of Wildlife fishery biologists will be consulted
- (iv) Installation of drop structures will be considered as a means of raising the water table to support the hydrological function of the wetlands

(2) Research the effects of the releases from Grizzly Reservoir on the fluvial geomorphology of the Roaring Fork River at North Star

(3) Boardwalks will be considered at the north and south ends of the preserve (the put -in and take-out) as a means of minimizing impacts

(4) The area surrounding the active beaver run and lodge will be off limits to the public

1.03.02 Dry Meadows

Dry meadows are the most extensive vegetation type at North Star. These meadows cover approximately 100 acres and are largely the product of extensive draining, chaining, seeding, burning, and other human manipulation for the purpose of agriculture. Originally, most of North Star was covered by a dense willow carr with occasional solitary narrowleaf cottonwoods (*Populus angustifolia*) and Colorado blue spruce (*Picea pungens*) or clumps of these trees in the drier sites. Beginning in the early 1950's, the landowner, James Hopkins Smith, Jr., adopted a strategy of willow eradication. He cleared the site of the native vegetation and replaced it with hay grasses, and either hayed or grazed it continually until the early 1980's.

The dry meadows are currently dominated by non-native grasses (e.g., smooth brome [*Bromopsis inermis*], Common timothy [*Phleum pratense*], Orchardgrass [*Dactylis glomerata*]), and a couple of native grasses (e.g., Agassiz bluegrass [*Poa agassizensis*]). Noxious weeds such as Canada thistle, plumeless thistle, houndstongue, oxeye daisy, tansy, and yellow toadflax (AKA butter and eggs) are a significant problem in the dry meadows and threaten the ecological integrity of this community.

Until 1978, North Star has been utilized for hay production and livestock grazing. The open space character of the meadow is recognized as a strong feature of the preserve, yet the pastoral character should be allowed to revert toward a more natural state.

Elk, mule deer, coyotes, fox, and red-tailed hawks all depend upon dry meadow along with various small mammals and ground-nesting songbirds.

A. Management Actions

(1) Weed management

- a) Noxious weeds will be managed via:
 - (i) Volunteer pulls
 - (ii) Spraying of approved herbicides by county staff
- b) Overseeding the pasture with native grasses will be considered based on cost
- c) Prescribed burning is considered too great a risk in this location

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(2) Improve wildlife habitat and encourage natural succession in the dry meadows

- a) Selected areas will be planted with willow and native shrubs to increase habitat complexity and forage for mule deer and elk
- b) Natural succession back to a willow carr will be facilitated by filling drainage ditches and removing culverts
- c) Natural narrowleaf cottonwood regeneration will be facilitated by protecting suckers from mule deer, elk, and beaver browsing. This will increase cover for larger wildlife species and roosts for raptors and great blue herons

1.03.03 Sedge And Sedge-Willow Marshes

Marshes, the dynamic meeting places of land and water, are among the most productive and diverse of all wildlife habitats. Not only do they attract a tremendous diversity of life, but they perform numerous functions that benefit humans as well. Since the dawn of human civilization people have been drawn to wetlands because of the goods (rich agricultural soil, timber for fuel and construction, fish, drinking water) and services (transport, water storage, storm protection, shoreline stabilization, erosion control, water purification, retention of pollutants, recreation) which they have to offer. Wetlands have been described as “the kidneys of the landscape” because of their water purifying roles and “biological supermarkets” because of their natural resources which humans exploit. Human dependence on water is absolute (as is all life) and, therefore, by extension, so is our dependence on wetlands. The valuable functions performed by marshes and other wetlands include:

- Conveyance and storage of floodwaters
- Sediment control
- Recreation
- Educational value
- Erosion prevention
- Wildlife habitat
- Water supply and quality maintenance
- Open space and aesthetic value

The marshes at North Star occupy approximately 35 acres and are dominated by beaked sedge (*Carex utriculata*) and five willow species: whiplash willow (*Salix lasiandra*), Bebb’s willow (*S. bebbiana*), Drummond’s willow (*S. drummondiana*), Geyer’s willow (*S. geyeriana*), and Rocky Mountain willow (*S. monticola*). Beaked sedge covers approximately 80% of all the marshes occurring at North Star with fowl bluegrass (*Poa palustris*) and other native graminoids occupying the rest. A major problem in the marshes and wet meadows is the encroachment of reed canarygrass (*Phalaris arundinacea*) into the wetlands. Because reed canarygrass is highly competitive, it poses a major threat to native wetland vegetation. Currently, North Star is developing acres of dense monocultures of reed canarygrass, resulting in the loss of dynamic physical and abiotic features and, in turn, decreased diversity of plants and animals. Reed canarygrass has little to no forage value to wildlife.

Native wildlife depending on the marshes at North Star include:

- Boreal toad
- Yellow warbler
- Sora
- Mink
- Long-tailed weasel
- Merriam’s shrew
- Western chorus frog
- Cedar waxwing
- Virginia rail
- Beaver
- Water shrew
- Western jumping mouse
- Rainbow trout
- Red-winged blackbird
- Great blue heron
- Muskrat
- Masked shrew
- Eared grebe

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- . Green-winged teal
- . American coot
- . American widgeon
- . Common snipe
- . Common yellowthroat

A. Management Actions

- 1) As mentioned earlier, the sedge and sedge -willow marshes will, for the most part, be passively encouraged to expand.
 - a) All drainage ditches on North Star will be filled or redirected so as to restore the hydrology originating on the slopes above the property and the springs at the toe of those slopes
 - b) The culverts draining the west side of North Star will be removed and replaced with a headgate that will facilitate both mosquito control and restoration of the hydrology
 - i) The mosquito control district (Bob Oxenburg) has offered to pay for this headgate)
 - c) Willows (*Salix spp.*), thinleaf alder (*Alnus incana*), and river birch (*Betula occidentalis*) will be planted in a few places along the edges of sedge dominated marshes on the west side of the river
 - d) Willow cuttings and wattles will be planted along the river as well as the ephemeral and permanent streams on the east side of the river th at flow under Colorado State Highway 82
 - e) All new plantings will be protected with welded wire for two growing seasons to protect from elk , mule deer, and beaver foraging
- 2) The marshes will be a primary focus of interpretive signage and environmental education efforts
 - a) All interpretive signage and displays will be placed along the East of Aspen Trail bordering North Star
 - b) All regulatory signage will be placed along the East of Aspen Trail bordering North Star
- 3) Users will be advised (via signage) to stay on existing trails
 - a) If it becomes necessary due to increasing user i mpacts, interpretive boardwalks will be constructed in the access corridors to control impacts
 - (i) Since these boardwalks may cross marshes every precaution will be taken to avoid any significant impact
- 4) Intensive management of reed canarygrass will be considered via:
 - a) Herbicides (e.g., Rodeo[®])
 - b) over-planting/over-seeding
 - c) mowing
 - d) integrated pest management methods (as per Kilbride and Paveglio 1999).
- 5) The existing gate in the northwest boundary (along the old Ute Trail) will be fixed and locked
- 6) Signage will be placed along the northern boundary of the nature preserve to prevent residents of the Preserve Subdivision and others from using the old Ute Tr ail or trespassing in the Sanctuary portion of North Star
 - a) Interpretive signage will be placed along this boundary explaining the prohibition

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1.03.04 Alluvial Fans, Aspen Groves, and Oak-Serviceberry Shrublands

Two aspen forest stands occur on alluvial fans at the base of Bell Mountain. At higher elevations aspen forests give way to Gambel oak shrubland which extends up the slopes of the mountain mixed with Douglas fir and lodgepole pine. On the meadow side, rabbit brush shrubland forms an edge between the heights of the forest and the flatness of the meadow.

The aspen stands and rabbit brush shrublands cover approximately 26 acres. These vegetational communities are considered seral, owing their presence to disturbance (e.g., fire, avalanche). Site conditions at North Star may be such that they will persist over time. Disturbances in the fans (e.g., avalanche or water depositions of colluvium) may maintain colonizing aspen stands, and the dryness of the rabbitbrush shrubland area will discourage domination of aspen. Due to the nature of alluvial fans, and the activity of pocket gophers, the soils in and around the fans are constantly disturbed. Consequently, noxious weeds are present and pose a threat to the integrity of this community.

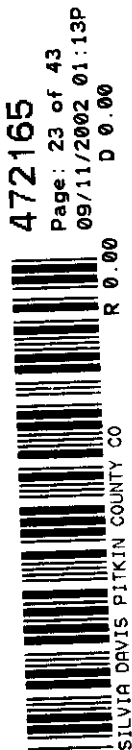
According to Roger Hollowell, former Ranch Manager of the North Star Ranch, as many as 50 elk cows formerly calved in the aspen on the alluvial fans. Currently, only a handful are doing so. Although it is difficult to determine the cause of this decline, it is likely that human activity has contributed. A diverse array of other wildlife depends on the alluvial fan ecological community for daily or seasonal life history requirements such as:

- Northern goshawk
- Meadow vole
- Black bear
- Coyote
- Red-naped sapsucker
- Red-tailed hawk
- Deer mouse
- Mule deer
- Warbling vireo
- Yellow rumped warbler
- Great horned owl
- Pocket gopher
- Red fox
- Western wood pewee
- Magillivray's warbler

The montane shrublands at the North Star Nature Preserve are relatively dry areas on upland sites on the slopes of Richmond Hill. They are characterized by dense stands of Gambel oak, Saskatoon serviceberry, snowberry, Wood's rose, and chokecherry with an occasional aspen, Douglas fir, or ponderosa pine. The montane shrub vegetational community provides an abundant food source and protected nest sites for a plethora of birds and mammals. Spotted towhees sing from the shrubs and Virginia's warblers build nests in the dense shrubs which protect their eggs and nestling from predators. Least chipmunks, golden-mantled ground squirrels, and snowshoe hares abound. North Star's shrublands also provide habitat for various shrews, voles, mice, bats, snowshoe hare, coyotes, black bears, and mountain lions.

A. Management Actions

- (1) Management will be limited to noxious weed control via:
 - a) volunteer pulls
 - b) backpack and ATV spraying of approved herbicides by county staff
 - c) biological control
- (2) If, over time, it appears that the aspen stands are being replaced by conifers due to a lack of disturbance, aspen regeneration can be encouraged via selective cutting
- (3) Interpretive displays will be placed along the East of Aspen Trail to explain the ecology of these communities



1.03.05 Mixed Conifer Forest

Douglas fir that is mixed with Engelmann spruce, lodgepole pine, and aspen dominates the forested areas on the slopes of Richmond Hill. Mountain maple is a common understory species in the denser areas. In these undisturbed forests, species that require interior forest habitat thrive. Sensitive mature forest interior residents such as American martens, three-toed woodpeckers, olive-sided flycatchers, and southern red-backed voles all live on these slopes. Two raptor species that require this type of habitat, northern goshawks and boreal owls, both nest and hunt on the slopes of Richmond Hill within North Star.

These coniferous forests are extremely important as snow collection areas. The greatest effective precipitation in the region occurs in these forests. Water is stored in the soils and slowly moves down the slopes to recharge the groundwater and resupply the wetlands and the river in the valley below.

A diverse array of wildlife depends on the conifer forest ecological community for daily or seasonal life history requirements such as:

- Northern goshawk
- Southern red-backed vole
- Black bear
- Masked shrew
- Pine grosbeak
- Boreal owl
- Pine squirrel
- Hermit thrush
- Ruby-crowned kinglet
- Pine marten
- Elk
- Snowshoe hare

A. Management Actions

- (1) Management of these areas must be coordinated with the White River National Forest and the special interest groups participating in the Richmond Ridge Master Plan process
- (2) Interpretive displays will be placed along the East of Aspen Trail to explain the ecology of these communities

1.04 WILDLIFE

1.04.01 Mule Deer & Elk

Currently, the Roaring Fork Watershed is experiencing an onslaught of unprecedented development. Consequently, we are losing wildlife habitat at an alarming rate. Two of the more charismatic wildlife species experiencing population declines because of this habitat conversion in the Roaring Fork Valley are mule deer (*Odocoileus hemionus*) and Rocky Mountain elk (*Cervus elaphus nelsoni*). Historically the valley floor and lower slopes of the Valley provided habitat for deer and elk winter range, reproduction, and migration. Over the last 30 years, however, human development and activity has destroyed much of the winter range and calving/fawning habitat and blocked migration routes.

Mule deer are of particular concern as their numbers have dropped dramatically statewide over the last few years. Resident deer use North Star in Spring, Summer, and Fall and migrate to lower elevations in the winter. Fawning does occur at North Star and has increased over the last few years as the shrublands have expanded, providing greater cover for does and fawns. Deer would greatly benefit from an increase in shrub biomass and forb production.



Presently a herd of approximately 50-100 elk use North Star as a migration corridor both in spring (primarily April 15th to May 15th) and fall primarily (October 15th to November 15th). In addition, there is some history of calving in the aspen of the colluvial fans (May 15th to June 15th), but this is rare. As stated in the previous section as many as 50 elk cows calved in the aspen on the alluvial fans. Currently, only a handful are doing so. Although it is difficult to determine the cause of this decline, it is likely that human activity has contributed.

1.04.02 Other Large Mammals

Coyote (*Canis latrans*), fox (*Vulpes velox*), black bear (*Ursus americana*), badger (*Taxidea taxus*), ermine (*Mustela erminea*), bobcat (*Lynx rufus*), American marten (*Martes americana*), and beaver (*Castor canadensis*) all occur at North Star. Of special interest is the beaver since they are keystone species, meaning that they create habitat for other wildlife species. There is a historic beaver lodge on the south side of North Star. A new bank lodge was constructed in 1999 on the east side of the river toward the south end of the preserve and is currently active.

1.04.03 Birds

Over 100 species of birds have been identified at North Star. These birds consist of residents, breeding neo-tropical migrants, and neo-tropical migrants that use North Star as a stopover. The interspersion of aspen, willow riparian, and spring-fed ponds provide nesting and foraging habitat for varied avian guilds. These guilds include woodpeckers and other cavity nesters, non-cavity tree nesting songbirds, shrub nesting songbirds, ground nesting songbirds, tree nesting wading birds, ground nesting wading birds, ground nesting waterfowl, nest-building raptors, and cavity nesting raptors. The aspen and willows support rich insect life and offer diverse nesting sites for perching birds. Waterfowl nest near the river but away from seasonally flooding areas. Their chicks are led to these areas of forage and cover. The oxbow lakes, spring-fed ponds, and quiet river waters are excellent duck habitat which is relatively scarce in the Roaring Fork River.

Ground nesting species are especially sensitive to human recreational disturbance and will abandon a nest after repetitive disturbance ((Tremblay and Ellison 1979); (Jeffrey 1987); (Yalden and Yalden 1990); (Hockin et al. 1992); [Watson, 1996 #7]). When flushed from a nest by human activity the young or eggs are exposed to weather and are vulnerable to predators such as ravens, raccoons, and foxes. As well, young birds require almost continuous feeding and may become weakened and die if the adults are otherwise occupied. Even if humans are careful, it is easy to step on eggs or chicks. The cryptic eggs of killdeers and green-tailed towhees blend in with the surrounding ground or vegetation. Killdeer nests are little more than a few sticks and stones and are very difficult to see. Nesting ducks will stay away for as long as humans are in close proximity. This can lead to death of the eggs due to excessive cooling or exposure to the sun. More frequently, it leads to nest abandonment or destruction of the nest by magpies or other predators.

Of particular conservation interest is the Great Blue Heron colony on Joy Smith's property but within 100 meters of North Star. It is estimated that there are approximately 63 Great Blue Heron colonies in the entire state of Colorado and the Smith colony is thought to be the only one occurring over 8500 feet in elevation and in blue spruce trees (most occur in cottonwoods). In other words Great Blue Heron colony is quite unique and ecologically significant. The presence of this colony has important management implications. In addition, most studies recommend a

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minimum 200 meter buffer zone from the periphery of colonies in which no human activity should take place during courtship and nesting seasons ((Vos et al. 1985); (Miller et al. 1998)) Because colonies may move every few years, management plans should encompass entire river systems ((Parker 1980)).

1.04.04 Small Mammals

At least 13 species of small mammal (e.g., mice, shrews, voles, chipmunks, etc.) occur in the various ecological communities at North Star. Among these species, some, such as the water shrew (*Sorex palustris*) and masked shrew (*Sorex cinereus*) are excellent indicators of high quality wetlands and riparian areas. Monitoring small mammals can provide insight into ecological change and human impacts since they have very small home ranges and do not migrate. Consequently, even very small changes in environmental quality, vegetation, hydrology, and/or soil compaction can be detected via shifts in small mammal species composition and/or abundance.

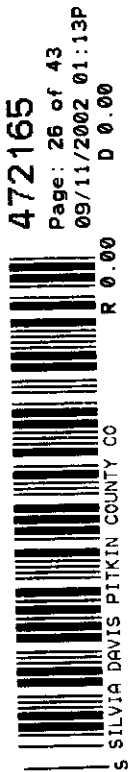
A. Management Actions

- (1) Encourage mule deer use of North Star by planting shrubs for forage and cover
- (2) Plant willows and other native riparian shrubs for increased bird and waterfowl habitat
- (3) Protect willow and cottonwood suckers against elk, mule deer, and beavers to improve habitat structural heterogeneity
- (4) Continue to restore the native willow carr to reestablish the original floral and faunal species assemblages

1.05 RESEARCH & MONITORING

Research and monitoring of North Star is necessary to guide management. Currently, volunteers led by the Watershed Coalition with financial and in-kind assistance from Pitkin County, City of Aspen, and private sources are conducting vegetation, small mammal, and bird monitoring that began in 1996. This work has produced invaluable information regarding the species composition and population trends within each of the ecological communities that comprise North Star. The monitoring project is being conducted in concert with a larger project directed by a research team from the Environmental Science and Engineering Division, Colorado School of Mines (CSM). The goal of the greater project is to examine the ecological and hydrological processes of the upper Roaring Fork Watershed using a watershed modeling.

Upon completion of the CSM project, the vegetation, bird, and small mammal monitoring will continue *ad infinitum*. In addition, a GPS/GIS monitoring program was begun in 1999 to evaluate the size and proportion of each vegetational community at North Star with a special emphasis on the wetland, riparian, and open water communities. Noxious weed infestations will be tracked over time using the same methods. Two permanent vegetation plots will be randomly placed in each of North Star's vegetational communities to track changes over time. This program will also be continuous.



1.06 PEOPLE & RECREATION

Recreational pressures on public lands in Colorado and the Roaring Fork Valley are increasing as our human population continues to grow. Current recreational uses at North Star include:

- Wildlife and nature observation
- Environmental education
- Wildlife and scenic photography
- Canoeing, kayaking, and rafting
- Paragliding and Hang gliding
- Catch and release fly-fishing

These recreational pressures affect wildlife and plant species diversity, survivorship, and recruitment. In addition, some of these activities cause erosion and soil compaction. Although North Star is ecologically sensitive and any human use will have an impact, it is also an important cultural asset to the citizens of the Roaring Fork Valley that can further ecological awareness and understanding. **As such, one of the most important goals of this plan is to achieve a balance between North Star as a nature preserve and as a cultural resource.**

A. Management Actions

- 1) The current (July 2000) river channel serves as a boundary between protected and public areas of the Nature Preserve (See Map 1)
 - a) The current river channel will be surveyed by a professional surveyor by December 31, 2000
 - b) The entire area west of the current (July 2000) location of the Roaring Fork River will be designated a "Wildlife Sanctuary"
 - i) Only authorized Pitkin County personnel, volunteers, and/or others conducting authorized research, monitoring, or management will be permitted on the west side of the river
 - ii) No river crossings will be permitted or structures built to facilitate crossings
 - iii) A 50 foot buffer zone shall be established around the active beaver lodge and forage area where human activity will be prohibited
- 2) User surveys may be conducted by the Open Space and Trails Program to determine public uses regarding North Star and its environs
- 3) Visitors will be restricted to three access corridors (See Map 1).
 - a) These will be located at the following existing access points: the north take -out (Corridor 1; see Map 2), the ranch gate to the "beach" (Corridor 2; see map 3), and the southeast put-in (Corridor 3; see map 4)
 - b) Each access corridor will be from the East of Aspen Trail to the river
 - c) A fourth access point will extend from the East of Aspen Trail to the paraglider/hang glider landing zone only
 - i) This access point will not extend to the river
 - ii) Only landing paragliders and hang gliders and Pitkin County Land Management and Open Space personnel will be permitted access at this point
 - d) Interpretive signage will be placed at the entrance to each of these corridors describing the ecological communities and sensitivity of the land at the site
 - e) These corridors will be clearly delineated on signage at the entrance to each corridor

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- 4) If it becomes necessary due to increasing user impacts, interpretive boardwalks may be constructed within the access corridors to control impacts
 - a) The purpose of these boardwalks will be to direct visitors away from sensitive areas yet allow them access to the river's edge and opportunities to observe wildlife and nature
 - (i) Since these boardwalks may cross sensitive vegetational communities, every precaution will be taken to avoid any significant impact
 - (ii) At the culmination of each spur near the river, a terminus could be established. It may consist of a log bench, educational signs and explanations of why people should not go further.
- 5) A series of interpretive displays and signs will be placed along the East of Aspen Trail educating visitors about the ecology, geology, and history of North Star
 - a) These displays will be designed such that they have a low visual impact to humans and do not hinder wildlife movements
 - b) No wetland will be impacted by the displays
 - c) All signage will be of a consistent style and require little maintenance
- 6) One ADA compliant viewing stand will be constructed at the existing parking lot by the large cottonwoods at the fence line (See Map 5) incorporating visual interpretive displays with a fixed spotting scope to enhance the educational value of the trail and North Star.
- 7) Existing graveled parking areas along Highway 82 will be improved and maintained.
 - a) Signs will be placed at each parking area and point of access displaying all regulations for the North Star Nature Preserve
 - b) A lockable gate will be installed at each of the access points with signage explaining any closures
 - c) Permits will be obtained from the Colorado Department of Transportation for any parking lot work in the Highway 82 right-of-way
- 8) Any commercial enterprise or organized recreational activity operating at the North Star Nature Preserve must apply for and receive a special use permit that is reviewed annually for compliance and stewardship and revocable at any time
 - a) One representative from any organization holding a North Star Special Use Permit must participate in the North Star Users Group which will meet at least twice a year to discuss the state of the ecology and recreation at North Star
 - i) Failure to comply could result in revocation of the special use permit and the privilege of using North Star
 - b) Ten or more violations of this management plan or any conditions of the special use permit by any permit holder within the first calendar year following approval of this plan by the BOCC or five violations in any calendar year thereafter at the North Star Nature Preserve will result in the permanent revocation of that permit
 - c) Ten or more violations relating to a particular activity authorized by this Plan within one calendar year subsequent to the first calendar year following BOCC approval of this Plan will result in the permanent prohibition of that activity at North Star
 - d) The following are the only active recreational uses that will be allowed on the North Star Nature Preserve east of the current (July 2000) location of the Roaring Fork River:
 - e) **Boating** (including, but not limited to, kayaking, canoeing, rafting, and tubing)



- i) Putting-in to and taking-out from the river will be restricted to access corridors one and three
- ii) Putting-in to and taking-out from the river at North Star will be reevaluated upon any court decision that clarifies the law regarding boating and navigable waterways
- iii) Only rafts rated for three people or less and less than or equal to ten feet in length will be allowed access to the River at the North Star Nature Preserve
- f) **Bird watching, nature/wildlife viewing, environmental education, meditation, etc.** along access corridors
 - i) If boardwalks become necessary, these activities will be restricted to those structures
- g) **Nordic skiing** within tracks set and maintained by the Aspen/Snowmass Nordic Skiing Council (ANSC)
 - i) ANSC must comply with Section 1.06(A)(8) of this plan as long as they are permitted to operate at North Star
 - ii) Skiing will be prohibited between April 15th and November 30th
 - iii) Skiing will be prohibited on the west side of the river
 - iv) The track will be no greater than 20 feet wide
 - (1) The ANSC will experiment with 2 classic (parallel) tracks with an adjacent snowshoe track for the season following BOCC approval of this plan. After that time period, the classic only policy will be revisited and will require BOCC approval prior to any changes.
 - v) The track will be maintained via motorized and non-motorized methods
 - (1) Motorized maintenance will be used on a minimal or "as necessary" basis
 - vi) The ANSC must receive approval of the track layout and related signage at the beginning of each season from the Director of the Pitkin County Open Space and Trails Program
 - vii) No nordic track shall be placed on the beaches of the Roaring Fork River
 - viii) There shall be a 10 foot setback from the banks of the Roaring Fork River for all nordic trails
- h) **Snowshoeing** shall be permitted on a groomed trail adjacent to the nordic trail between November 15th and April 15th
- i) **Recreational Non-commercial Paragliding and Hang Gliding**
 - i) Organizations engaging in these activities at North Star activity must comply with Section 1.06(A)(8) of this plan
 - ii) All recreational non-commercial hang gliding will be regulated by Aspen Hang Gliding Club or such alternative party(s) that holds the special use permit for the recreational paragliding landing rights at North Star
 - iii) All paragliders/hang gliders landing at North Star register with and be members of Parapente Aspen, Aspen Paragliding Club, or such alternative party(s) as may be designated by Pitkin County to regulate the landing rights at North Star prior to landing at North Star
 - iv) The maximum number of recreational paraglider landings per day at North Star is 30 Monday through Friday and 50 on Saturday and Sunday
 - (1) Landing activity at North Star will be monitored through the end of 2000 in order to determine if this number is too high.
 - (2) The BOCC will be presented with the results of spot landing counts and will determine what the permitted maximum number of landings shall be
 - v) The maximum number of recreational paraglider landings per day at North Star is 5
 - vi) Parapente Aspen, Aspen Hang Gliding Club, or such alternative party(s) as may be designated by Pitkin County must provide literature describing the ecology of the

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North Star Nature Preserve, describing and locating the landing zone , and explaining all regulations associated with paragliding, hang gliding respectively

- (1) This literature must be submitted to and approved by Pitkin County Open Space and Trails
 - (2) A log must be kept recording the time date and numbers of single and tandem landings each day at North Star
 - vii) Parapente Aspen, the Aspen Hang Gliding Club, and/or such alternative party as may be designated by Pitkin County must submit a noxious weed management and land stewardship plan for the landing zone to the Pitkin County Open Space Director annually
 - viii) Paraglider/hang glider landing will be permitted only within an area designated by the County called the landing zone or LZ (See Map 1)
 - ix) The landing zone may be subject to relocation at the discretion of the Open Space Director as ecological conditions change
 - (1) The landing zone cannot be relocated without the express written consent of the Director of Open Space and Trails
 - (2) All regulations pertaining to paragliding/hang gliding must be posted at the entrance to the landing zone and at the take-off site by Parapente Aspen, Aspen Hang Gliding Club, or such alternative party(s) as may be designated by Pitkin County
 - x) Paragliding and hang gliding will be prohibited between 5:00 PM and 7:00 AM
 - xi) In addition to the penalties described in this plan, individual paragliders or hang gliders shall forfeit their landing rights at the North Star Nature Preserve after a third violation of the regulations herein
 - xii) A no-fly zone on the air space within 200 meters (650 ft) of the current and any future Great Blue Heron colony
 - j) **Commercial Paragliding**
 - i) Any commercial paragliding operator landing at North Star must comply with all of the regulations described in Section 1.06(A)(9)(e) of this plan
 - ii) Organizations engaging in these activities at North Star activity must comply with Section 1.06(A)(8) of this plan
 - iii) No more than one commercial paragliding operator will be permitted to operate at North Star in a given season
 - iv) Fourteen commercial tandem paragliding landings will be the maximum allowed per day
 - k) **Commercial Kayaking/Canoeing and Commercial Kayaking/Canoeing Classes**
 - i) Organizations engaging in these activities at North Star activity must comply with Section 1.06(A)(8) of this plan
 - ii) No more than one commercial kayaking/canoeing operator will be permitted to operate at North Star in a given season
- 9) **Mosquito control** shall continue at the North Star Nature Preserve under the direction of the Mosquito Control District Board of Directors
- a) Organizations engaging in this activity at North Star must comply with Section 1.06(A)(8) of this plan
 - b) Organizations engaging in this activity at North Star must meet with the Pitkin County Environmental Health Director annually to review methods current technology

10) Anchoring boats at the North Star Nature Preserve is prohibited

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- 11) Walking along the riverbanks outside of the access corridors is prohibited
- 12) Storing equipment related to commercial or recreational activities (e.g., canoes, kayaks, coolers) is prohibited on the North Star Nature Preserve
- 13) No commercial or recreational activity shall be permitted on the North Star Nature Preserve except as set forth in this plan
- 14) The following activities are specifically prohibited at the North Star Nature Preserve:
 - a) Commercial Hang Gliding
 - b) Fishing, except from boats
 - c) Parasailing
 - d) Team sports of any kind
 - e) Beaching kayaks, canoes, rafts
 - f) Motorized or mechanized activities not directly related to management activities or nordic ski trail maintenance
 - g) Playing radios, CDs, or tapes for purposes not related to management or research so that it is audible to other people or wildlife
 - h) Commercial filming or photography of any kind
- 15) Lawn chairs and similar products are prohibited except for use by the handicapped or senior citizens
- 16) Picnicking (Defined as one or more persons gathering for a sit-down meal with a blanket, basket, etc.) is permitted along the East of Aspen Trail only
- 17) Picnicking related to any commercial activity or organized by a commercial enterprise is prohibited on the North Star Nature Preserve
- 18) Use shall be restricted to the East of Aspen Trail between 6:00 PM and 8:00 AM
- 19) Use, other than authorized research and management, shall be restricted to the East of Aspen Trail and access corridors 1 and 3 during the height of the bird breeding season and elk calving season — June 1st through June 30th
- 20) Dogs and other pets shall be prohibited on the entire North Star Nature Preserve at all times
- 21) Horses and other livestock shall be prohibited on the North Star Nature Preserve at all times
 - a) The only exception to this would be the temporary introduction of goats by the Open Space and Land Management Departments as a method of noxious weed control
- 22) Removal of game across the North Star Nature Preserve is prohibited
- 23) Unauthorized collection of plants or plant materials shall be prohibited on the North Star Nature Preserve at all times
- 24) Unauthorized activities shall be prohibited on North Star within 200 meters (165 feet) of the existing and any future Great Blue Heron colony

- 25) School groups larger than 6 people must receive permission from Pitkin County Open Space
- 26) Special events (e.g., weddings, concerts) shall be prohibited on the North Star Nature Preserve
- 27) Hunting shall be prohibited at all times on the North Star Nature Preserve

1.07 NEIGHBORS/SURROUNDING LAND USES

North Star Nature Preserve is the perfect neighbor to a homeowner. It is a quiet place which offers beautiful vistas and the opportunity to observe wildlife, while affording a sense of both space and privacy to adjacent properties. In order to maintain this landscape, it is important that adjacent property owners respect the same guidelines used at North Star.

A. Management Actions

- (1) North Star's neighbors should be encouraged to:
 - a) Respect the following conservation guidelines:
 - (i) Do not build in the floodplain
 - (ii) Protect wetlands on private land
 - (iii) Preserve the riparian zone and river
 - (iv) Preserve existing natural vegetation
 - (v) Manage noxious weeds
 - (vi) Use only native plant species for landscaping
 - (vii) Avoid fences. If necessary, use only wildlife friendly fences
 - (viii) Protect land west of the Roaring Fork to the maximum extent possible
 - b) Be considerate of other neighbors and users of the preserve
 - (i) Set development back to the maximum extent possible from North Star's boundaries. The minimum setback should be no less than 100' from the North Star boundary
 - (ii) Locate development in areas that are visually screened from North Star by natural landforms or vegetation
 - (iii) Minimize development, drainage, and erosion impact on the wetlands and river
 - (iv) Minimize noise from motorized equipment, radios, dogs, etc.
 - c) Preserve a ¼ mile wide elk migration corridor to allow movement between Smuggler Mountain and Richmond Ridge
 - d) Neighbors should consider the value of offering a conservation easement to North Star -- these include tax benefits, open space preservation and strengthening of natural ecosystems

1.08 PUBLIC POLICY

Presently there are a number of state and local policies which restrict development in that area based on environmental concerns. The following section summarizes these policies and recommends additional legal conservation procedures.

A. Pitkin Board of County Commissioners Ordinance

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A resolution to manage North Star according to the guidelines of the North Star Nature Preserve Resource Management Plan 2000, should be adopted by the Pitkin County Commissioners. This plan provides a base line management policy for North Star Nature Preserve. Further development activity on adjacent properties should respect the objectives stated in this plan since development on these properties may have significant impact on the environment of the North Star. Therefore, review and approval agencies need to be aware that this policy exists and that there are special areas of concern relative to approval for development by adjacent landowners.

B. Zoning

The present zoning of the property is AFR-10. This theoretically permits one single family dwelling unit per 10 acres. An application should be made to rezone the property to a newly created zone district called something such as "Nature Preserve" or "Open Space" based on the intent to conserve the land as open space and critical wildlife habitat.

C. Areas and Activities of Local and State Interest

Special review is required for development proposed in areas of local and state interest which are specified in Section II, 5-400.2a of the Pitkin County Code. These include floodplain and wildlife areas which exist at North Star. It is recommended that within North Star no further development other than trails and signage be permitted in these areas. Applications for private residential development in the Roaring Fork River Valley should be subject to similarly strict review for the least possible impact on the ecosystems. Lot owners should be encouraged to build both outside the floodplain and the wildlife areas.

D. Clean Water Act Section 404

Any proposed development which will directly impact waters of the United States or jurisdictional wetlands is subject to review by the U.S. Army Corps of Engineers and Pitkin County. This type of development is currently prohibited by the Pitkin County Land Use Code except where there is absolutely no alternative.

E. Water Rights

- a) The North Star Agreement for Water Rights, Book 339, pages 543 -544, should be reviewed by an attorney and recommendations be made to ensure that those water rights are maintained. This may mean maintaining the ditches leading to the historically irrigated meadows.
- b) Spring Water Rights should be researched and recommendations made.

F. Subsurface Rights

It should be determined whether subsurface rights exist which would affect North Star in any way.

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G. Easements and Rights-of-Way

Power line and utility easements on the property should be studied and the implications reviewed.

H. Conservation Easements/Open Space and Trails Program Acquisitions

Neighboring property owners should be advised of incentives to donate land or conservation easements to the Pitkin County Open Space and Trails Program (OST) to extend the area managed for wildlife conservation. In addition, a conservation easement for North Star should be given OST so as to ensure protection in perpetuity.

I. Colorado Department of Transportation (CDOT)

CDOT has specific regulations regarding development within the 60 foot right -of-way. Communication should be maintained with CDOT regarding any rezoning as well as the sensitivity of North Star. Additionally, CDOT should keep the County apprised of any activities it is planning on Highway 82 where it borders North Star.

1.09 CONCLUSION

...in the end is the beginning...

T.S. Eliot

This Management Plan outlines key concepts and general directives for resource management of North Star Nature Preserve with emphasis on North Star as a link in the Roaring Fork Valley ecosystem. In order to ensure North Star and its environs are conserved as undeveloped open space and critical wildlife habitat the recommended actions must be implemented. This will involve the following measures:

- A. Adoption of this plan by the Pitkin County BOCC,
- B. Direction and implementation of this plan by the Pitkin County Open Space Department and Assets Management Division,
- C. Additional work by the Pitkin County Attorney's Office,
- D. Adoption of policies by Pitkin County BOCC,
- E. Cooperative development by neighbors of North Star.

The adoption of the concept of preservation of the west side of the Roaring Fork River, the restrictions described herein, and the implementation of regulations for ecologically sensitive development along the River corridor, as well as the proposed conservation easement will ensure rich wildlife habitat and scenic vistas to be appreciated by the public who travel State Highway 82, those using the proposed pedestrian trail and all neighbors to the North Star Nature Preserve.

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**SECTION II
ENFORCEMENT**

2.01 *To be determined by the BOCC.*

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SECTION III REFERENCES

- Carney, K. M., and W. J. Sydeman. 1999. A Review of Human Disturbance Effects on Nesting Colonial Waterbirds. *Waterbirds* 22:68-79.
- Hockin, D., M. Ounsted., M. Gorman, D. Hill, V. Keller, and M. A. Barker. 1992. Examination of the effects of disturbance on birds with reference to its importance in ecological assessments. *Journal of Environmental Management* 36:253-286.
- Jeffrey, R. G. 1987. Influence of human disturbance on the nesting success of African black oystercatchers. *South African Journal of Wildlife Research* 17:71-72.
- Kilbride, K. M., and F. L. Paveglio. 1999. Integrated Pest Management to control reed canarygrass in seasonal wetlands of southwestern Washington. *Wildlife Society Bulletin* 27:292-297.
- Miller, S. G., R. L. Knight, and C. K. Miller. 1998. Influence of recreational trails on breeding bird communities. *Ecological applications* 8:162.
- Parker, J. 1980. Great Blue Herons (*Ardea herodias*) in Northwestern Montana: Nesting Habitat Use and the Effects of Human Disturbance. M.S. Thesis. University of Montana, Missoula, MT..
- Spackman, S., K. Fayette, J. Siemers, K. Murrell, and M. Wunder. 1999. Roaring Fork Watershed Biological Inventory 1997-1999. Colorado Natural Heritage Program, Fort Collins, CO.
- Tremblay, J., and L. N. Ellison. 1979. Effects of human disturbance on breeding of black-crowned night herons. *Auk* 96:364-369.
- Vos, D. K., R. A. Ryder, and W. D. Graul. 1985. Response of breeding great blue herons to human disturbance in northcentral Colorado. *Colonial Waterbirds* 8:13-22.
- Watson, J. J., G. I. H. Kerley, and A. McLachlan. 1996. Human activity and potential impacts on dune breeding birds in the Alexandria coastal dunefield. *Landscape and Urban Planning* 34:315-322.
- Yalden, P. F., and D. W. Yalden. 1990. Recreational disturbance of breeding golden plovers. *Biological Conservation* 51:243-262.



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NORTH BRIDGE TRAIL
TO RIVER

EAST OF
ASPEN TRAIL

RANCH GATE TRAIL
TO "BEACH"

LANDING ZONE

LZ ACCESS TRAIL

SOUTHEAST TRAIL ALONG
FENCE TO RIVER

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North Star Nature Preserve



Highway Side Wetlands



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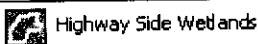
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North Trail Access




Map 2: Access Corridor 1
North Take-Out Trail



LENGTH: 150 feet



North Trail Access Corridor

-  1 meter
-  1 - 2 m
-  2 - 3 m

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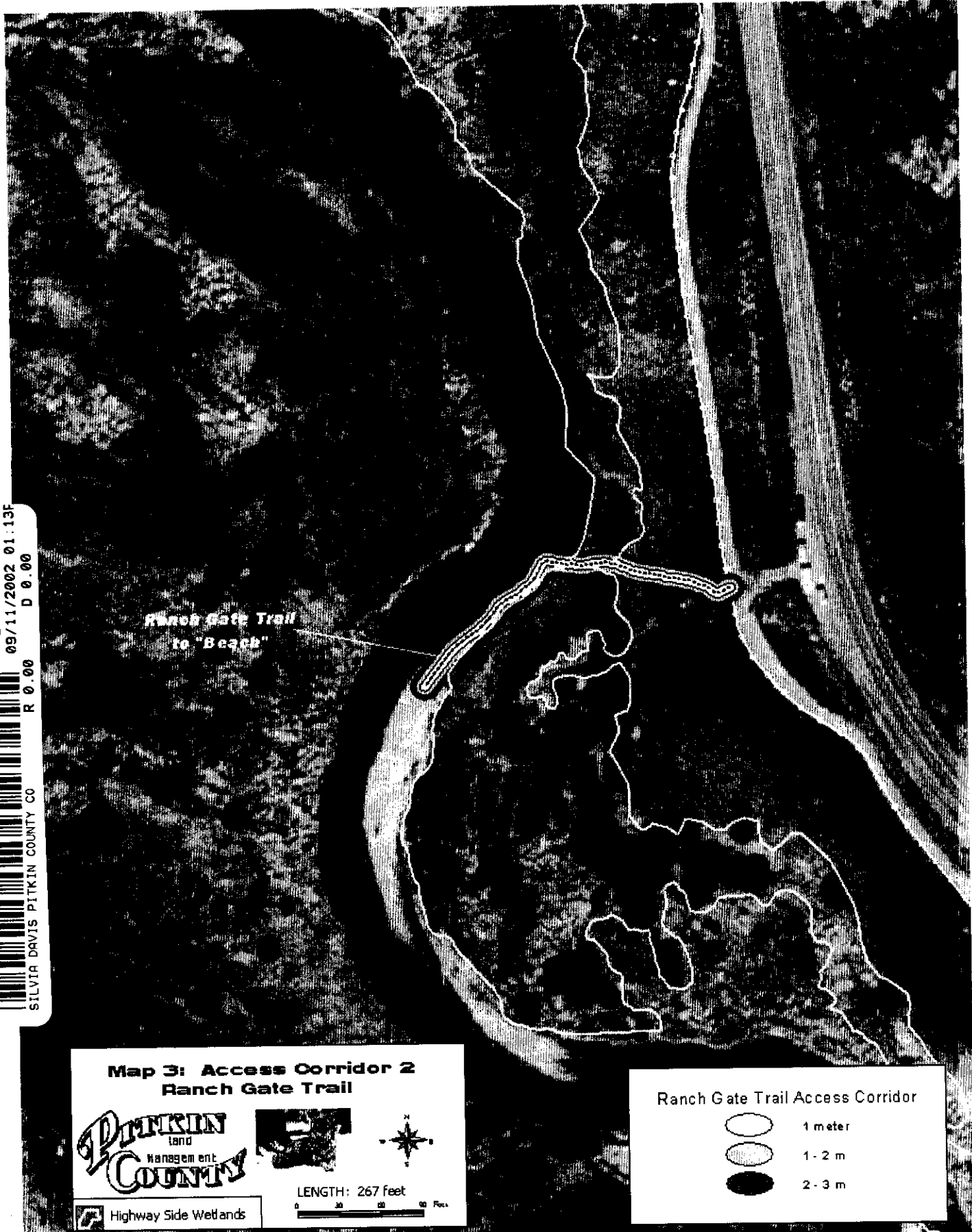
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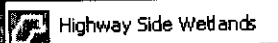
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**Map 3: Access Corridor 2
Ranch Gate Trail**



LENGTH: 267 feet



Ranch Gate Trail Access Corridor

-  1 meter
-  1 - 2 m
-  2 - 3 m

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Southeast Access Corridor

**Map 4: Access Corridor 3
Southeast Trail Access**








LENGTH: 302 feet



Highway Side Wetlands

Southeast Trail Access Corridor

-  1 meter
-  1 - 2 m
-  2 - 3 m

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SILVIA DRVIS PITKIN COUNTY CO

Interpretive and Educational
Viewing Platform with Fixed Spotting Scope

**Map 5: Interpretive and Educational
Viewing Platform**



DIMENSIONS: 10' x 14'

0 30 60 Feet

Highway Side Wetlands