

ENVIRONMENTAL ASSESSMENT, FONSI AND DECISION RECORD

**BLM, Bishop Field Office
351 Pacu Lane, Suite 100
Bishop, CA 93514**

EA Number: CA-170-08-24

Lease/Serial/Case File No.: Fish Slough ACEC

Proposed Action Title/Type:

Fish Slough Prescribed Burn Project

Location of Proposed Action:

Fish Slough Area of Critical Environmental Concern (ACEC), Benton Management Area, Inyo and Mono Counties, CA. T. 5S and 6S, R. 33E, Sections 6, 30 and 31. Fish Slough 7.5' Quadrangle.

Applicant (if any): BLM, Bishop Field Office, Wildlife Habitat Restoration Project

Plan Conformance:

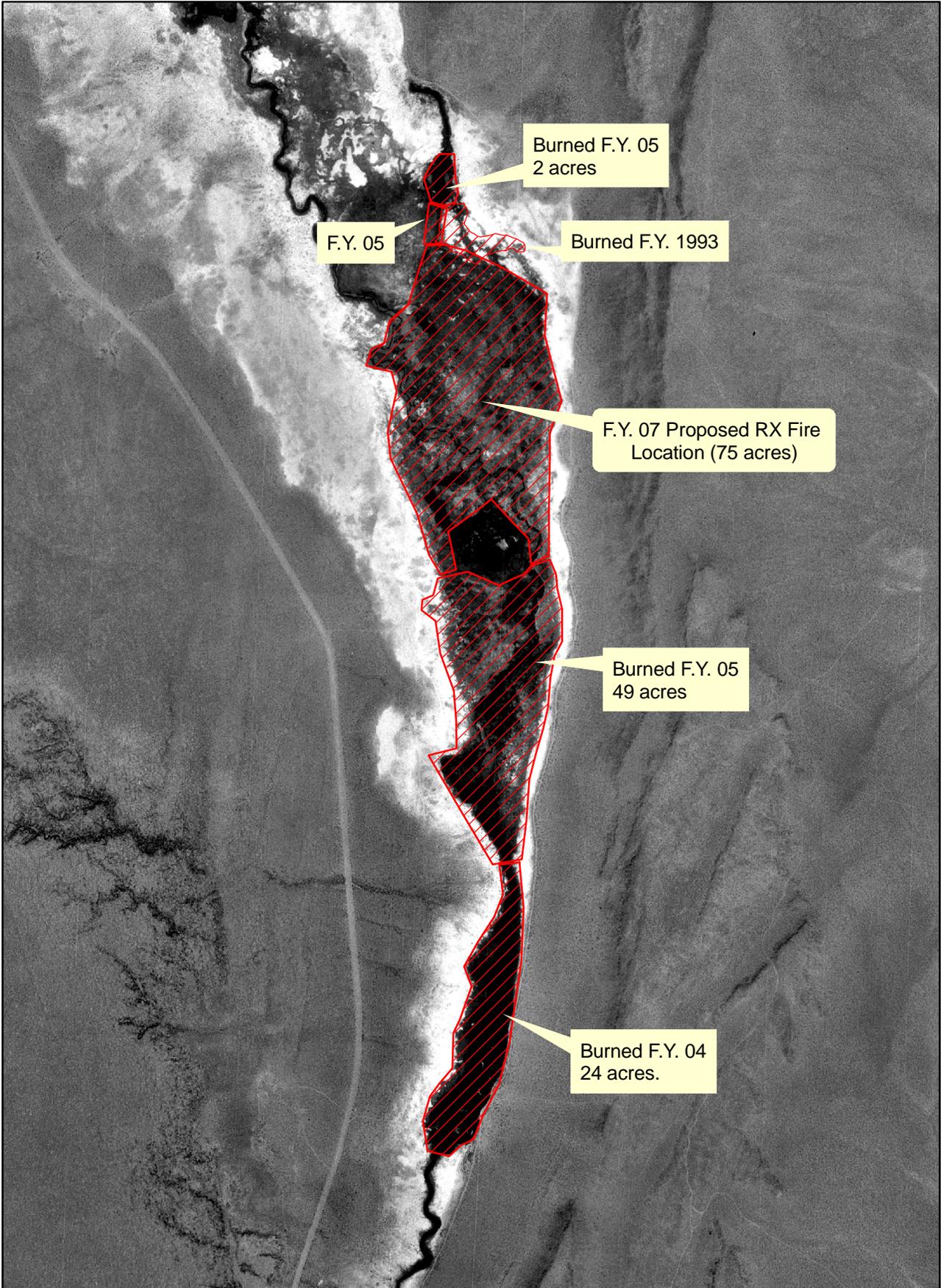
The proposed action is subject to the Bishop Resource Management Plan, approved March 25 1993. The proposed action was developed to implement RMP guidance and is designed to ensure conformance with General Policies, Area Manager's Guidelines, Valid Existing Management, Standard Operating Procedures, Decisions and Support Needs prescribed in the Bishop RMP. The proposed action has been reviewed and is in conformance with the plan.

The proposed action also tiers to the Bishop Field Office Fire Management Plan (2004) which includes burn prescriptions to allow for the implementation of limited and modified suppression techniques," and supports the need to "Use prescribed burning to support desired plant community, fire prevention and wildlife habitat goals," as listed on p. 23 of the 1993 Bishop RMP Record of Decision.

Need for Proposed Action:

The proposed action was developed to implement Bishop RMP (BLM, 1993) direction to protect and enhance unique or important vegetation communities and wildlife habitats. The proposed action would implement the following additional RMP Decisions specific to rare species and wetland protection in the Fish Slough Area of Critical Environmental Concern.

Fish Slough ACEC RX Fire



Legend

 Proposed and Past RX Fire Locations

Fish Slough 7.5' DOQ
T. 5 S. and 6 S, R. 33 E.
Secs. 30, 31, and 6.

1:15,000

0 0.15 0.3 0.6 Miles



US Department of the Interior
BUREAU OF LAND MANAGEMENT
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Date Prepared: 1/3/2008
Project: fish_slough_burn_07

1. Manage all stream reaches that contain essential habitat characteristics described in the recovery plan for any endangered or threatened fish species to meet desired plant community goals for riparian areas (BLM, 1993, p. 17).
2. Maintain or enhance habitat for endangered, threatened, and candidate species, and other species of management concern (BLM, 1993, p. 40).
3. Manage candidate species, sensitive species and other species of management concern in a manner to avoid the need for listing as state or federal endangered or threatened species (BLM, 1993, p. 12).

The proposed action also meets tasks identified in the USFWS Owens Basin Wetland and Aquatic Species Recovery Plan (USFWS, 1998), specifically Task 2.1.4 – Identify and restore or enhance potentially suitable habitat for rare species.

Aquatic vegetation densities are currently reducing the amount of available open water habitat for the Owens Pupfish (*Cyprinodon radiosus*). In addition, the area south of BLM spring contains dense areas of dead bulrush which are currently suppressing new vegetative growth and nutrient cycling necessary for increased macroinvertebrate and microinvertebrate production important in waterfowl diets (Szalay and Resch 1996). By implementing a series of prescribed burns within these densely vegetated areas earlier successional patterns will begin to emerge that will enhance the overall seral diversity and nutrient cycling within the wetland plant community.

Description of Proposed Action:

The proposed project area is in the Fish Slough ACEC located on public lands north of Bishop and NW of U.S. 120 in the Benton Management Area. The project area encompasses a Transmontane Wetland/Marsh that occurs along a 10 km (6 mi) stretch of spring-fed wetlands that make up Zone 1 of the ACEC.

The proposed action would involve continuing a series of prescribed burns (EA# CA-017-95-50) to improve habitat conditions for the endangered Owens Valley pupfish (*Cyprinodon radiosus*) and to increase the overall seral diversity of the wetland plant community. Figure 1 depicts 5 burn polygons with corresponding dates of previous and proposed prescribed burns. Locations of prescribed burns would occur on a 3-5 year rotation associated with vegetation production and post-burn response, e.g. diversity of seral stages.

Project Implementation Requirements

The following protective measures would be applied during prescribed burn implementation to reduce the probability of residual impacts and the need for subsequent mitigation:

1. Vehicular access to the proposed project area would occur on an existing road/vehicle track.
2. All vehicles and tools used pre project implementation would be pressure-washed prior to transport to the project site to avoid the spread of noxious weeds.
3. Surveys for invasive weed infestations would be completed prior to and the completion of the project. If any invasive weeds are identified within or adjacent to the project areas, the weeds would be removed to reduce the risk of an invasive soil seed bank developing.
4. If archaeological resources are encountered the Field Office Area Archaeologist would be contacted and a determination made with regard to where additional project activities could still take place.
5. All improvements required for project implementation would be limited to the least intensive method required to meet project objectives.
6. Biological monitors would be present at the project site during construction-related activities and will ensure, in particular, no disturbance to the off-channel ponds immediately south of the BLM Spring fence enclosure
7. Staging areas would be clearly flagged to prevent heavy equipment from damaging sensitive habitats and plant species.

Environmental Impacts:

The proposed action is not within a Wilderness, or Wilderness Study Area and there would be no effects on any lands so designated.

Air quality would not be affected. The proposed action is within the Mono Basin / Owens Valley federal non-attainment area. [or] The proposed action is not within a federal air quality non-attainment area. The action would not result in the emission of PM₁₀. Smoke management will follow Bishop Field Office smoke management plan specifications.

There would be no impacts to prime farm lands, flood plains, nor water quality (including ground or surface waters).

There would be no disproportionate impacts to low income or minority groups, per Executive Order 12898 (2/11/94).

There would be no impacts to mineral resources. No mineral resources occur in the project area.

There would be no impacts to range resources. The project area is not within a grazing allotment nor is grazing an authorized use on BLM administered lands within Zone 1 of the Fish Slough ACEC.

Wild and Scenic River Study Corridors

Proposed Action

The proposed action would occur in a designated segment of a waterway that has been determined to be eligible for classification as recreational under the Wild and Scenic Rivers Act of 1968. Due to the transitory nature of the proposed action, no impairment of the existing "outstanding and remarkable riparian" values of the stream reach would occur. (Appendix A2-2).

Area of Critical Environmental Concern

Proposed Action

The proposed action directly benefits the resources within the Fish Slough ACEC by protecting and restoring habitat for wetland dependent species. The proposed action meets the Fish Slough ACEC Plan (1984) goal of "preserving and enhancing the natural integrity of Fish Slough and its associated habitats".

No Action

The No Action alternative would cause decreases in vegetative seral diversity which would reduce available habitat for the Owens Valley pupfish and resident and migratory waterfowl.

Threatened and Endangered Species

There would be no negative impacts to threatened and endangered species. The proposed action has undergone informal consultation with the Fish and Wildlife Service and has received a no adverse effect determination (March 6, 2003) for both the threatened Fish Slough milk vetch (*Astragalus lentiginosus* var. *piscinencis*) and the endangered Owens Valley pupfish (*Cyprinodon radiosus*).

Proposed Action

The most northern extent of the proposed burn area occurs approximately 0.1 miles south of the current known habitat occupied by the Owens pupfish (*C. radiosus*). Owens pupfish do not utilize the water column during winter months. Apparently, pupfish will lie in the sand/silt/detritus bottom material until water temperature or other physical cues cause them to reoccupy the more shallow open water pools. Due to this behavior, pupfish are not susceptible to the effects of burning the native bulrush above the water line. Pupfish may directly benefit from the proposed action due to a reduced cover of emergent vegetation (*Scirpus* sp., *Typha domingensis*) characterizing their preferred shallow water habitat. Biomass accumulation has hindered the ability of determining the controlling physical features for shallow and deeper water areas just to the south of the currently occupied habitat. The proposed action may expose and permit identification of other nearby shallow water sites suitable for introducing the pupfish.

No Action

Implementing the No Action alternative would maintain the status quo for reduced vegetation seral diversity and retention of dead vegetation biomass. The density of bulrush in the vicinity of current pupfish occupied habitat would go unchanged and prohibit the probable creation of improved open water habitat more suited to the ecology of pupfish. Locations for establishing other distinct pupfish populations would not be identified.

Cultural Resources

Proposed Action

Response received from the Owens Valley Tribes in the past has been positive toward this type of project which enhances re-growth of native vegetation, allowing harvest of material better suited to construction of basketry or other traditional items. Fire use has historically been beneficial to native plant populations and is concurrent with objectives set forth in this document.

No Action

Implementing a No Action alternative would maintain the status quo for reduced vegetation seral diversity and retention of dead vegetation biomass leading to a loss of vegetation, potentially eliminating future sources of native material suitable to traditional uses.

Visual resources

Proposed Action

The proposed project area is located within a Visual Resource Management (VRM) Class II Objective area. The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape would be low and transitory, e.g. 3 months until vegetation production begins.

No Action

By not implementing the proposed action no change to the existing landscape would occur.

Soils and Vegetation

Wetland soils consist of the Aquic torriorthent complex which are sandy loam in texture, and poorly drained.

Vegetation in the proposed project area is a mosaic of Submerged Aquatic Marsh (*Ruppia maritima*, *Potamogeton foliosus*, *Zannichelia palustris*) and Aquatic Marsh (*Scirpus acutus*, *S. americanus*, *Typha domingensis*, *Phragmites australis*, and *Eleocharis rostellata*) vegetation.

Proposed Action

Implementation of the proposed action would ameliorate current biomass accumulation which hinders the development of habitat mosaics comprised of vegetation in different seral states. Over the long term, the proposed action would integrate fire as a periodic and managed causal disturbance agent to accelerate the development of habitat seral diversity.

No Action

By not implementing the proposed action continued accumulations of biomass would occur and limit available habitat for the Owens pupfish and migratory waterfowl.

Invasive, non-native species

No weeds currently occur within the project area. *Lepidium latifolium* (perennial pepperweed) does occur on LADWP administered lands at NW Spring, but active control of this species has taken place.

Proposed Action

Adherence to the weed transport controls for access vehicles and other equipment would decrease the risk of any weed seed being introduced to the sight. There is some risk that once the burn occurs that waterfowl or wind could transport seed or plant material from weeds, e.g perennial pepperweed, and tamarisk respectively to the sight. However, no past invasions of either species has occurred with other prescribed burns within the project area.

No Action

By not implementing the proposed action no risk of weed invasion into the post-burn project area would exist. However, if current biomass accumulations continue a natural fire could increase the total burn area susceptible to weed invasion.

Wildlife habitat

The Fish Slough ACEC contains a rich and diverse fauna. The relatively isolated stretch of permanent surface water and associated habitats which characterize Fish Slough have resulted in both high species diversity and the presence of several species of limited distribution to include: the federally endangered Owens pupfish (*Cyprinodon radiosus*), the Owens Valley form of speckled dace (*Rhinichthys osculus* ssp.). Two other native Owens Valley fish have been historically recorded in the permanent aquatic environment of Fish Slough, the Owens tui chub (*Gila bicolor snyderi*), and Owens sucker (*Castostomus fumeiventris*). Two species of spring snail also are found in the ACEC; *Pyrgulopsis perturbata*, and *P. wongii*.

In addition to those species listed above, a variety of wildlife species dependent on wetland habitat during at least part of their life cycle are found here including such birds as blackbirds, marsh wrens, bitterns, ducks, and raptors (including the golden eagle, *Aquila chrysaetos*, and prairie falcon, (*Falco mexicanus*). Species of mammals commonly found within the proposed project area are the raccoon (*Procyon lotor*) and California vole (*Microtus californicus*). Raccoons typically create an array of trample "paths" or runways within the less dense vegetation near the periphery of the bulrush/cattail areas. They forage in any of the ephemerally and perennially submerged aquatic areas where prey species like the crayfish (*Procambrus clarki*) are seasonally abundant. The vole, also, occupies the occasionally inundated area peripheral to bulrush/cattail vegetation and typically dominated by wire-grass (*Juncus balticus*). Vole runways are typically numerous in wire-grass areas indicating an apparent site preference where the availability of food in the form of grasses, sedges and herbs is the most abundant.

Proposed Action

The proposed action would not substantively impact any of the above mentioned species or their habitat because all potential impacts would be avoided due to the Project Implementation Requirements. Potential benefits of the proposed action would include a restoration of wildlife habitat due, primarily, to the elimination of the biomass accumulation and permitting greater seral diversity in the emergent wetland environment.

No Action

Implementing this alternative would maintain the status quo for large volumes of biomass accumulation restricting the overall habitat potential productivity through a lack of seral stage diversity in the emergent wetland. The diversity and density of individual plant and animal species dependent on this environment would continue to be curtailed in their potential expression in the emergent wetland.

Cumulative effects

Cumulative effects are direct or indirect effects that result from an action when considered with other past, present and reasonably foreseeable future actions of the agency and other agencies or private parties.

The limited scale and magnitude of the proposed action and associated environmental impacts significantly reduces the probability of negative cumulative effects associated with project implementation. The proposed action would not contribute to negative cumulative effects to the human environment or resource values in, or adjacent to the proposed project vicinity.

Description of Mitigation Measures and Residual Impacts:

Protective measures were incorporated into the proposed project design and implementation requirements (Page 3) to reduce the probability of residual impacts and the need for subsequent mitigation. No residual impacts are anticipated and no additional mitigation measures are needed or proposed.

Implementation Monitoring:

Bishop Field Office Botanist and Recreation Staff would direct and monitor project implementation to ensure conformance with project design and implementation requirements identified in the proposed action.

Effectiveness Monitoring:

Post project monitoring would be conducted annually to bi-annually to assess the effectiveness of the proposed project at meeting project objectives. Monitoring of the project would entail documenting burn effects on vegetation and target wildlife species.

Monitoring results would be presented at annual Fish Slough ACEC meetings and annual reports.

Public Input:

The proposed action has been presented to the Fish Slough ACEC committee and information will be made available in a local press release. No comments have been received.

Persons/Agencies Consulted:

California Native Plant Society, Bristlecone Chapter (CNPS)
Eastern Sierra Audubon Society
Bishop Paiute Tribe of the Owens Valley
Big Pine Paiute Tribe of the Owens Valley
Mono Lake Kuzedika Indian Cultural Preservation Foundation
Benton Ü tu Ütü Gwaitu Paiute Tribe

References:

- Bisson, Peter A., Rieman, Bruce E., Luce, Charlie, Hessburn, Paul F., Lee, Danny C., Kersher, Jeffrey L., Reeves, Gordon H., Gresswell, Robert E., 2003. Fire and aquatic ecosystems of the western USA: current knowledge and key questions. *Forestry Ecology and Management* 178 213-229.
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- Elzinga, C.L., Salzer, D.W. and Willoughby, J.W. 1998 Measuring and Monitoring Plant Populations. BLM Technical Reference 1730-1. National Applied Resource Sciences Center. Denver, CO.
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- Szalay, Ferenc A, Resh, Vincent H. 1996. Responses of wetland invertebrates and plants important in waterfowl diets to burning and mowing of emergent vegetation. *Wetlands* 17(1): 149.
- U.S. Fish and Wildlife Service. 1998. Owens Basin Wetland and Aquatic Species Recovery Plan, Inyo and Mono counties, California. Portland, Oregon.

Preparer(s):

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Terry Russi, Supervisory Wildlife Biologist
William Kerwin, Archaeologist

Date:

Reviewed By: Joseph Pollini **Date:** 11/23/07
Joseph Pollini, Environmental Coordinator

FINDING OF NO SIGNIFICANT IMPACT/DECISION RECORD

I have reviewed this environmental assessment including the explanation and resolution of any potentially significant environmental impacts. The proposed project to restore wildlife habitat in the Fish Slough ACEC has been designed to incorporate protective measures and implementation requirements that substantially reduce the potential for significant environmental impacts and no additional mitigation measures are required. I have determined that the proposed action with the mitigation measures described below would not have any significant impacts on the human environment and that an EIS is not required.

There would be no negative effect on threatened or endangered species as a result of the action.

The proposed project is also consistent with conservation strategies identified in the USFWS Owen Basin Aquatic Species Recovery Plan (USFWS, 1998).

I have determined that the proposed project is in conformance with the Bishop Resource Management Plan, which was approved March 25, 1993. This plan has been reviewed, and the proposed action conforms to the land use plan terms and conditions as required by 43 CFR 1610.5.

It is my decision to implement the project with the mitigation measures identified below.

Mitigation Measures/Remarks:

The following protective measures would be applied during restoration project implementation to reduce the probability of residual impacts and the need for subsequent mitigation:

1. Vehicular access to the proposed project area would occur on an existing road/vehicle track.
2. All vehicles and tools used pre project implementation would be pressure-washed prior to transport to the project site to avoid the spread of noxious weeds.
3. Surveys for invasive weed infestations would be completed prior to and the completion of the project. If any invasive weeds are identified within or adjacent to the project areas, the weeds would be removed to reduce the risk of an invasive soil seed bank developing.
4. If archaeological resources are encountered the Field Office Area Archaeologist would be contacted and a determination made with regard to where additional project activities could still take place.
5. All improvements required for project implementation would be limited to the least intensive method required to meet project objectives.
6. Biological monitors would be present at the project site during construction-related activities
7. Staging areas would be clearly flagged to prevent heavy equipment from damaging sensitive habitats and plant species.

Authorized Official: _____


Bill Dunkelberger, Field Office Manager

Date: _____

1/23/08