

Exhibit 5

Modoc National Forest

Engineering Reports

on Four Proposed Motorized Mixed Use Roads

Final Environmental Impact Statement
for Motorized Travel Management

November 12, 2009

Engineering Report

Modoc National Forest

Warner Mountain Ranger District

Analysis of Road # 40N24

for Motorized Mixed Use Designation

Prepared by:

Forest Engineer

Date: _____

Concurred by:

Forest Supervisor

Date: _____

Forest: **Modoc** District: **Warner Mountains**

Road Number: **40N24** Name: **Cherry Creek (also called Soup Springs Loop)**

Beginning Mile Post: 0.0 Ending Mile Post: 8.3

Traffic Service Level: A B C D

Objective Maintenance Level: 1 2 3 4 5

Operational Maintenance Level: 1 2 3 4 5

Maintenance by: FS Non-Forest Service ROW or jurisdiction? Yes No

Any road use agreements, maintenance agreements, or other encumbrances?
 Yes No

Description of agreements or encumbrances: None (does not cross private lands)

Subject to Highway Safety Act? Yes No

Non-highway-legal vehicles currently permitted? Yes No

Is motorized mixed use consistent with State and local laws? Yes No

The California Vehicle Code OHV Provisions [38001(a)] includes a statement that says "For the purposes of this division, the term "highway does not include fire trails, logging roads, service roads regardless of surface composition, or other roughly graded trails and roads upon which vehicular travel by the public is permitted".

Local Officials including the Modoc County Sheriff and others do not consider these roads to be highways for this purpose.

In a letter dated February 10, 2009, the Modoc County Board of Supervisors stated "We appreciate the extra effort put forth by the Forest to designate additional miles for mixed use. We recognize there was significant pressure to do otherwise. The vehicle usage on the vast majority of the Forest roads is minimal and allowing passenger vehicles and ATVs to share the roads is appropriate. Additionally there is no history of accidents or injuries to warrant restricting use.

The County supports all efforts to prohibit mixed use where there are valid safety concerns."

Description of road management objectives, existing use, and proposed use: The goal for recreation (including motorized mixed use of vehicles) in the Forest Plan is that the over all management of the Forest results in a full range of recreation opportunities, ranging from primitive to modern recreation settings. Provide and manage a Forest Transportation System (roads and trails) to accomplish resource management objectives (including opportunities) while protecting resource values. This road is currently open to all motor vehicles. The primary use is recreation. Other uses include logging, fuelwood cutting, grazing, hunting and fishing. It is not feasible to reduce the maintenance level of this road, due to the terrain, the existing horizontal and vertical alignments, and the road width and surfacing type. No changes are proposed for the use of this road.

Summary of Findings:

Motorized mixed use currently occurs on all of this road. There is no accident history. Traffic volumes are low. Sight distances are generally long. This road is wide with adequate runout space in the ditches or shoulders. Anticipated average speeds are 35 mph or less. These factors lead to the conclusion that the probability of a crash is low, and the severity of a crash is likely to be moderate

Factors Considered:

1. Operator considerations:

Prudent operators in compliance with the California Vehicle Code and other applicable laws and regulations is assumed.

2. Crash history:

There is no crash history available for this road.

3. Traffic volume and type:

Non-highway-legal vehicles:

< 12 inch tread width < 50 inch tread width >50 inch tread width

Highway-legal vehicles:

Passenger cars Commercial vehicles Recreation vehicles (RV's)

Traffic on the Cherry Creek Road 40N24 comes off from the West Warner Road 42N05. No traffic counts were done on the Cherry Creek Road specifically. However traffic will be less than on the West Warner Road.

Traffic counts were done at the intersection of the West Warner Road 42N05 and the Parker Creek Road 42N31. Almost all of the traffic using the roads in this area enter or leave the area through this intersection. Traffic was also counted on the Deep Creek Road at the Forest Boundary. Traffic was counted during ten separate periods of 1 to 4 hours. The time periods counted included mornings and evenings, and weekdays and weekends. Traffic was counted for a total of 22 hours. 33 vehicles were counted, for an average of less than 1.5 vehicles per hour at the Parker Creek location and less than one vehicle per hour in Deep Creek. Of the 33 vehicles counted there was one motorcycle, 1 bicycle, and the remainder were cars, pickups, or SUV's. See traffic count summary in

Appendix B & details in Appendix C traffic count log.

4. Speed - Anticipated average speed (85th percentile):

Anticipated average speeds on this roads is 35 mph or less.

5. Road surface type:

This road is surfaced with crushed aggregate.

6. Intersections with other roads and trails:

Numerous intersections along the route. See attached map.

7. Other roadway factors:

This road is relatively wide. It was constructed as single lane roads, and is shown on our inventory as a single lane road. However past maintenance practices have widened this road to approximately 18 to 20 feet. Sight distance is adequate for the anticipated average speed on this road.

8. Roadside conditions:

This road has an inside ditch that can be driven into with most vehicles in an emergency.

9. Risk without mitigation:

Crash probability: High Med Low

Crash severity: High Med Low

Mitigation Measures:

A sign plan will be developed after the travel management decision is made on the Forest. Share the Road signs may be appropriate at entry points to the Forest.

Conclusion:

The Modoc National Forest has the lowest recreation use of any National Forest in the National Forest System. We receive much lower motor vehicle use on our Maintenance Level 3 (ML3) and 2 (ML2) roads than any other Forest in Region 5. This is due primarily to our sparse population (Modoc County has 9000 people in the entire county), long distance to population centers and a long distance to popular interstate road systems.

Both the Modoc County Sheriff and the local California Highway Patrol (CHP) are not aware of any OHV accidents that have occurred on the Forest. The CHP does not patrol on our ML3 roads and only responds if there has been an accident.

OHV use on this Forest has not grown nearly as fast as other locations in California as demonstrated by our survey. Therefore it is reasonable to continue to provide this opportunity.

Currently mixed use is allowed on this road. Nothing found during this analysis indicates that a change to the current use is needed.



Engineering Report
Modoc National Forest
Doublehead Ranger District
Analysis of Road # 44N77
for Motorized Mixed Use Designation

Prepared by:

Forest Engineer

Date: _____

Concurred by:

Forest Supervisor

Date: _____

Forest: **Modoc** District: **Doublehead**

Road Number: **44N77** Name: **Bench**

Beginning Mile Post: 0.0 Ending Mile Post 10.5

Traffic Service Level: A B C D

Objective Maintenance Level: 1 2 3 4 5

Operational Maintenance Level: 1 2 3 4 5

Maintenance by: FS Non-Forest Service ROW or jurisdiction? Yes No

Any road use agreements, maintenance agreements, or other encumbrances?
 Yes No

Description of agreements or encumbrances: 0.5 miles on the south end of this route crossed private land without a right of way. This section will not be designated on the Motor Vehicle Use Map.

Subject to Highway Safety Act? Yes No

Non-highway-legal vehicles currently permitted? Yes No

Is motorized mixed use consistent with State and local laws? Yes No

The California Vehicle Code OHV Provisions [38001(a)] includes a statement that says "For the purposes of this division, the term "highway does not include fire trails, logging roads, service roads regardless of surface composition, or other roughly graded trails and roads upon which vehicular travel by the public is permitted".

Local Officials including the Modoc County Sheriff and others do not consider these roads to be highways for this purpose.

In a letter dated February 10, 2009, the Modoc County Board of Supervisors stated "We appreciate the extra effort put forth by the Forest to designate additional miles for mixed use. We recognize there was significant pressure to do otherwise. The vehicle usage on the vast majority of the Forest roads is minimal and allowing passenger vehicles and ATVs to share the roads is appropriate. Additionally there is no history of accidents or injuries to warrant restricting use.

The County supports all efforts to prohibit mixed use where there are valid safety concerns."

Description of road management objectives, existing use, and proposed use: The goal for recreation (including motorized mixed use of vehicles) in the Forest Plan is that the over all management of the Forest results in a full range of recreation opportunities, ranging from primitive to modern recreation settings. Provide and manage a Forest Transportation System (roads and trails) to accomplish resource management objectives (including opportunities) while protecting resource values. This road is currently open to all motor vehicles. The primary use is recreation. Other uses include logging, fuelwood cutting, grazing, hunting and fishing. It is not feasible to reduce the maintenance level of this road, due to the terrain, the existing horizontal and vertical alignments, and the road width and surfacing type. No changes are proposed for the use of this road.

Summary of Findings:

Motorized mixed use currently occurs on all of this road. There is no accident history. Traffic volumes are low. Sight distances are generally long. This road is wide with adequate runout space in the ditches or shoulders. Anticipated average speeds are 35 mph or less. These factors lead to the conclusion that the probability of a crash is low, and the severity of a crash is likely to be moderate

Factors Considered:

1. Operator considerations:

Prudent operators in compliance with the California Vehicle Code and other applicable laws and regulations is assumed.

2. Crash history:

There is no crash history available for this road.

3. Traffic volume and type:

Non-highway-legal vehicles:

< 12 inch tread width < 50 inch tread width >50 inch tread width

Highway-legal vehicles:

Passenger cars Commercial vehicles Recreation vehicles (RV's)

Traffic counts were done at the 5 different locations at the main entry points to the analysis area that includes this road. The time periods counted included mornings and evenings, and weekdays and weekends. Traffic was counted for a total of 85 hours, in 27 different counting periods. 259 vehicles were counted, for an average of less than 3.5 vehicles per hour. Of the 259 vehicles counted there was 7 motorcycles, 6 Truck/Tractors, the remainder were cars, pickups, or SUV's. See traffic count summary in Appendix B & details in Appendix C traffic count log. If traffic on the Medicine Lake road is excluded (it is a paved road not proposed for mixed use) then there were 120 vehicles in 62 hours of counting for average of less than 2 vehicles per hour.

4. Speed - Anticipated average speed (85th percentile):

Anticipated average speeds on this road is 35 mph or less.

5. Road surface type:

This road is surfaced with crushed aggregate.

6. Intersections with other roads and trails:

Numerous intersections along the route. See attached map.

7. Other roadway factors:

This road is relatively wide. It was constructed as single lane roads, and is shown on our inventory as a single lane road. However past maintenance practices have widened this road to approximately 18 to 20 feet. Sight distance is adequate for the anticipated average speed on this road. See attached Photo.

8. Roadside conditions:

This road has an inside ditch that can be driven into with most vehicles in an emergency.

9. Risk without mitigation:

Crash probability: High Med Low

Crash severity: High Med Low

Mitigation Measures:

A sign plan will be developed after the travel management decision is made on the Forest. Share the Road signs may be appropriate at entry points to the Forest.

Conclusion:

The Modoc National Forest has the lowest recreation use of any National Forest in the National Forest System. We receive much lower motor vehicle use on our Maintenance Level 3 (ML3) and 2 (ML2) roads than any other Forest in Region 5. This is due primarily to our sparse population (Modoc County has 9000 people in the entire county), long distance to population centers and a long distance to popular interstate road systems.

Both the Modoc County Sheriff and the local California Highway Patrol (CHP) are not aware of any OHV accidents that have occurred on the Forest. The CHP does not patrol on our ML3 roads and only responds if there has been an accident.

OHV use on this Forest has not grown nearly as fast as other locations in California as demonstrated by our survey. Therefore it is reasonable to continue to provide this opportunity.

Currently mixed use is allowed on this road. Nothing found during this analysis indicates that a change to the current use is needed.



Engineering Report
Modoc National Forest
Warner Mountain Ranger District
Analysis of Road # 46N06
for Motorized Mixed Use Designation

Prepared by:

Forest Engineer

Date: _____

Concurred by:

Forest Supervisor

Date: _____

Forest: **Modoc** District: **Warner Mountains**

Road Number: **46N06** Name: **Cold Creek**

Beginning Mile Post: 0.0 Ending Mile Post: 12.2

Traffic Service Level: A B C D

Objective Maintenance Level: 1 2 3 4 5

Operational Maintenance Level: 1 2 3 4 5

Maintenance by: FS Non-Forest Service ROW or jurisdiction? Yes No

Any road use agreements, maintenance agreements, or other encumbrances?
 Yes No

Description of agreements or encumbrances: Unrestricted Government Use ROW's over private lands that the road crosses.

Subject to Highway Safety Act? Yes No

Non-highway-legal vehicles currently permitted? Yes No

Is motorized mixed use consistent with State and local laws? Yes No

The California Vehicle Code OHV Provisions [38001(a)] includes a statement that says "For the purposes of this division, the term "highway does not include fire trails, logging roads, service roads regardless of surface composition, or other roughly graded trails and roads upon which vehicular travel by the public is permitted".

Local Officials including the Modoc County Sheriff and others do not consider these roads to be highways for this purpose.

In a letter dated February 10, 2009, the Modoc County Board of Supervisors stated "We appreciate the extra effort put forth by the Forest to designate additional miles for mixed use. We recognize there was significant pressure to do otherwise. The vehicle usage on the vast majority of the Forest roads is minimal and allowing passenger vehicles and ATVs to share the roads is appropriate. Additionally there is no history of accidents or injuries to warrant restricting use.

The County supports all efforts to prohibit mixed use where there are valid safety concerns."

Description of road management objectives, existing use, and proposed use: The goal for recreation (including motorized mixed use of vehicles) in the Forest Plan is that the over all management of the Forest results in a full range of recreation opportunities, ranging from primitive to modern recreation settings. Provide and manage a Forest Transportation System (roads and trails) to accomplish resource management objectives (including opportunities) while protecting resource values. This road is currently open to all motor vehicles. The primary use is recreation. Other uses include logging, fuelwood cutting, grazing, hunting and fishing. It is not feasible to reduce the maintenance level of this road, due to the terrain, the existing horizontal and vertical alignments, and the road width and surfacing type. No changes are proposed for the use of this road.

Summary of Findings:

Motorized mixed use currently occurs on all of this road. There is no accident history. Traffic volumes are low. Sight distances are generally long. This road is wide with adequate runout space in the ditches or shoulders. Anticipated average speeds are 35 mph or less. These factors lead to the conclusion that the probability of a crash is low, and the severity of a crash is likely to be moderate

Factors Considered:

1. Operator considerations:

Prudent operators in compliance with the California Vehicle Code and other applicable laws and regulations is assumed.

2. Crash history:

There is no crash history available for this road.

3. Traffic volume and type:

Non-highway-legal vehicles:

< 12 inch tread width < 50 inch tread width >50 inch tread width

Highway-legal vehicles:

Passenger cars Commercial vehicles Recreation vehicles (RV's)

Most of the traffic on the Cold Creek Road enters off from the PlumbValley Road 45N35. Traffic counts were done on the Plumb Valley Road 45N35 and the Dismal Swamp Road 48N21. These are two of the highest use roads within the analysis area. Traffic was counted during eight separate periods of 1 to 4 hours. The time periods counted included mornings and evenings, and weekdays and weekends. Traffic was counted for a total of 27 hours. 43 vehicles were counted, for an average of less than 2 vehicles per hour on the Plumb Valley Road and less than one vehicle per hour at Dismal Swamp. Of the 43 vehicles counted there was one Recreational Vehicle, the remainder were cars, pickups, or SUV's. See traffic count summary in Appendix B & details in Appendix C traffic count log.

4. Speed - Anticipated average speed (85th percentile):

Anticipated average speeds on this road is 35 mph or less.

5. Road surface type:

This road is surfaced with crushed aggregate.

6. Intersections with other roads and trails:

Numerous intersections along the route. See attached map.

7. Other roadway factors:

This road is relatively wide. It was constructed as single lane roads, and is shown on our inventory as a single lane road. However past maintenance practices have widened this road to approximately 18 to 20 feet. Sight distance is adequate for the anticipated average speed on this road. See attached Photo.

8. Roadside conditions:

This road has an inside ditch that can be driven into with most vehicles in an emergency.

9. Risk without mitigation:

Crash probability: High Med Low

Crash severity: High Med Low

Mitigation Measures:

A sign plan will be developed after the travel management decision is made on the Forest. Share the Road signs may be appropriate at entry points to the Forest.

Conclusion:

The Modoc National Forest has the lowest recreation use of any National Forest in the National Forest System. We receive much lower motor vehicle use on our Maintenance Level 3 (ML3) and 2 (ML2) roads than any other Forest in Region 5. This is due primarily to our sparse population (Modoc County has 9000 people in the entire county), long distance to population centers and a long distance to popular interstate road systems.

Both the Modoc County Sheriff and the local California Highway Patrol (CHP) are not aware of any OHV accidents that have occurred on the Forest. The CHP does not patrol on our ML3 roads and only responds if there has been an accident.

OHV use on this Forest has not grown nearly as fast as other locations in California as demonstrated by our survey. Therefore it is reasonable to continue to provide this opportunity.

Currently mixed use is allowed on this road. Nothing found during this analysis indicates that a change to the current use is needed.



Engineering Report
Modoc National Forest
Devils Garden & Doublehead Ranger
Districts
Analysis of Road # 46N10
for Motorized Mixed Use Designation

Prepared by:

Forest Engineer

Date: _____

Concurred by:

Forest Supervisor

Date: _____

Forest: **Modoc** District: **Doublehead**

Road Number: **46N10** Name: **Mowitz**

Beginning Mile Post: 0.0 Ending Mile Post: 30.7

Traffic Service Level: A B C D

Objective Maintenance Level: 1 2 3 4 5

Operational Maintenance Level: 1 2 3 4 5

Maintenance by: FS Non-Forest Service ROW or jurisdiction? Yes No

Any road use agreements, maintenance agreements, or other encumbrances?
 Yes No

Description of agreements or encumbrances: None (does not cross private property)

Subject to Highway Safety Act? Yes No

Non-highway-legal vehicles currently permitted? Yes No

Is motorized mixed use consistent with State and local laws? Yes No

The California Vehicle Code OHV Provisions [38001(a)] includes a statement that says "For the purposes of this division, the term "highway does not include fire trails, logging roads, service roads regardless of surface composition, or other roughly graded trails and roads upon which vehicular travel by the public is permitted".

Local Officials including the Modoc County Sheriff and others do not consider these roads to be highways for this purpose.

In a letter dated February 10, 2009, the Modoc County Board of Supervisors stated "We appreciate the extra effort put forth by the Forest to designate additional miles for mixed use. We recognize there was significant pressure to do otherwise. The vehicle usage on the vast majority of the Forest roads is minimal and allowing passenger vehicles and ATVs to share the roads is appropriate. Additionally there is no history of accidents or injuries to warrant restricting use.

The County supports all efforts to prohibit mixed use where there are valid safety concerns."

Description of road management objectives, existing use, and proposed use: The goal for recreation (including motorized mixed use of vehicles) in the Forest Plan is that the over all management of the Forest results in a full range of recreation opportunities, ranging from primitive to modern recreation settings. Provide and manage a Forest Transportation System (roads and trails) to accomplish resource management objectives (including opportunities) while protecting resource values. This road is currently open to all motor vehicles. The primary use is recreation. Other uses include logging, fuelwood cutting, grazing, hunting and fishing. It is not feasible to reduce the maintenance level of this road, due to the terrain, the existing horizontal and vertical alignments, and the road width and surfacing type. No changes are proposed for the use of this road.

Summary of Findings:

Motorized mixed use currently occurs on all of this road. There is no accident history. Traffic volumes are low. Sight distances are generally long. This road is wide with adequate runout space in the ditches or shoulders. Anticipated average speeds are 35 mph or less. These factors lead to the conclusion that the probability of a crash is low, and the severity of a crash is likely to be moderate

Factors Considered:

1. Operator considerations:

Prudent operators in compliance with the California Vehicle Code and other applicable laws and regulations is assumed.

2. Crash history:

There is no crash history available for this road.

3. Traffic volume and type:

Non-highway-legal vehicles:

< 12 inch tread width < 50 inch tread width >50 inch tread width

Highway-legal vehicles:

Passenger cars Commercial vehicles Recreation vehicles (RV's)

Traffic counts were done at the 7 different locations at the main entry points to the analysis area, that includes this road. The time periods counted included mornings and evenings, and weekdays and weekends. Traffic was counted for a total of 175 hours, in 53 different counting periods. 223 vehicles were counted, for an average of less than 1.5 vehicles per hour. Of the 213 vehicles counted there were four OHV's, the remainder were cars, pickups, or SUV's. See traffic count summary in Appendix B & details in Appendix C traffic count log.

4. Speed - Anticipated average speed (85th percentile):

Anticipated average speeds on this road is 35 mph or less.

5. Road surface type:

This road is surfaced with cinders.

6. Intersections with other roads and trails:

Numerous intersections along the route. See attached map.

7. Other roadway factors:

This road is relatively wide. It was constructed as single lane roads, and is shown on our inventory as a single lane road. However past maintenance practices have widened this road to approximately 18 to 20 feet. Sight distance is adequate for the anticipated average speed on this road. See attached Photo.

8. Roadside conditions:

This road has an inside ditch that can be driven into with most vehicles in an emergency.

9. Risk without mitigation:

Crash probability: High Med Low

Crash severity: High Med Low

Mitigation Measures:

A sign plan will be developed after the travel management decision is made on the Forest. Share the Road signs may be appropriate at entry points to the Forest.

Conclusion:

The Modoc National Forest has the lowest recreation use of any National Forest in the National Forest System. We receive much lower motor vehicle use on our Maintenance Level 3 (ML3) and 2 (ML2) roads than any other Forest in Region 5. This is due primarily to our sparse population (Modoc County has 9000 people in the entire county), long distance to population centers and a long distance to popular interstate road systems.

Both the Modoc County Sheriff and the local California Highway Patrol (CHP) are not aware of any OHV accidents that have occurred on the Forest. The CHP does not patrol on our ML3 roads and only responds if there has been an accident.

OHV use on this Forest has not grown nearly as fast as other locations in California as demonstrated by our survey. Therefore it is reasonable to continue to provide this opportunity.

Currently mixed use is allowed on this road. Nothing found during this analysis indicates that a change to the current use is needed.



