1. **What is a shaded fuel break?**

A shaded fuel break is a forest management strategy used for mitigating the threat of wildfire in areas where natural fire regimes have been suppressed, leading to a dangerous buildup of combustible vegetation. Constructing a shaded fuel break is the process of selectively thinning and removing more flammable understory vegetation while leaving the majority of larger, more fire tolerant tree species in place.

2. **Why has it been proposed to construct a shaded fuel break along the City Creek Canyon road corridor this spring?**

A shaded fuel break is recommended as a means to provide safe ingress and egress from the canyon in the event of a fire emergency. Because of the ecologically sensitive nature of the canyon, its location to the downtown metropolitan area, and use by millions of visitors annually, other avenues of fire mitigation like controlled burns and (unshaded) fuel breaks were found to be less cost effective and not as safe.

The need for the project was reconfirmed last summer when emergency crews treating a 150 acre fire in the central portion of the canyon raised concern about the safety of the road corridor in terms of accessibility. In an effort to mitigate the consequences of emergency vehicles not being able to access, or leave the canyon in the event of a fire, it was decided that the most optimal time to begin the project would be before the 2009 fire season.

3. **How will the shaded fuel break impact the road corridor visually?**

The City Creek Canyon road corridor will not look the same. While most of the larger trees that provide shade for the road will be left in place, dead wood and underbrush along the road will be removed.

4. **Will all of the shade be removed from the road?**

No. A shaded fuel break is intended to leave the larger trees that shade the road in place while eliminating the understory that is more likely to contribute to the severity of a fire.

5. **Will the understory grow back in, hence recreating the problem with fuel loading?**

Yes, the understory will grow back. The shaded fuel break will have to be regularly maintained to keep fuel loading under control. This first phase of the project will be more intensive than future maintenance because of the existing heavy fuel load.

6. **Besides a shaded fuel break, are there alternatives for mitigating fire in City Creek Canyon? If so, what are those alternatives?**
Alternatives include using other forestry management strategies like controlled burning or a smaller, unshaded fuel break (clear cutting). However, these alternatives are not preferable. Another option is to leave the canyon as is by doing nothing which would not mitigate the current threat or consequences of a fire in the canyon or ease the impact of fire damage to the canyon in the future.

7. **Will the city be mitigating the threat of catastrophic fire in the canyon by other means this summer?**

As in the past, the city will continue prohibiting the use of recreational fire grills and smoking in the canyon during times when fire danger is high. In incorporated Salt Lake City, fire bans are determined and regulated by the Salt Lake Fire Department Chief.

8. **Have any environmental analyses been conducted in the canyon prior to the break proposal?**

To date, environmental analysis of the canyon includes a systematic GIS survey of invasive, non-native plant species along the road. The results of these studies, as with any conducted by the city or its consultants are available for public view.

The vegetation survey was conducted in 2008 by Salt Lake City watershed specialists using industry protocols and covers 200 acres of city property adjacent to the road corridor. Data from this study will be used guide the city in treating the weed infestations cost effectively, and monitoring the infestations over time.

9. **Will any additional environmental assessments be conducted prior to the start of the study?**

In response to requests for more ecological study involving wildlife and habitat potential within the proposed shaded fuel break area, Public Utilities is considering pursuing additional sources of funding for these research initiatives.

With community participation we hope to gather additional data about the important plant and animal habitats along the road, areas of cultural importance, sensitive areas and the potential long term consequences of any fuel reduction project. The city plans to consult with non-governmental habitat advocates, community specialists and others to provide guidance for project planning and implementation.

10. **How long is the formal public input process for this project?**

The City hopes to balance the fire threat with the community’s concern for the canyon and reach mutually acceptable decisions as soon as possible.

11. **Why is this project so much larger than and dissimilar to local fuel break projects?**

A shaded fuel break is less common than clear cut breaks which are generally narrower but remove all vegetation, not just the undergrowth. Some local projects have been smaller scale clear cut type fuel breaks. As proposed, the City Creek fuel break is a
selective thinning of the roadside understory which leaves fire resistant dominant vegetation in place

Local examples of fuel breaks include the cutting of all vegetation up to 15ft from the edge of pavement, which eliminates shade over the road and severely modifies the character of the canyon. Shaded fuel breaks do not have this severe of an impact on the aesthetics or canopy above and near the road.

12. Does the possibility of doing a smaller demonstration project prior to the full scale project exist?

Yes. The State of Utah Invasive Species Mitigation Fund has given Salt Lake City a grant which can be used to develop a demonstration project. This type of demonstration project would help the public view and provide input on the aesthetic impact a shaded fuel break might have on the canyon road corridor, although it would be insufficient to provide fire mitigation.

13. Will the fuel break contribute to the spread invasive plant species in the canyon?

Disturbing the sites may allow existing noxious weed infestations to creep into the fuel break area, or it may allow for the suppressed weed seed in the area to propagate.

Salt Lake City has gone to great effort to survey the current invasive weed infestations so that infestations can be monitored and treated before they become a problem. Ecological restoration will be conducted throughout the fuel break where appropriate.

14. Can the cut be focused on the removal of diseased, dead and dying wood rather than living stems?

Not necessarily. Living stems have the potential to contribute to the severity of a fire as much as dead wood by acting as ladder fuels. Additionally, like living stems, dead wood provides important habitat for plants and animals and it may be desirable to leave them undisturbed. A shaded fuel break is a selective process that would allow for these options.

15. What machinery will be used?

Chainsaws, chippers and hand tools will be used for the entirety of the process.

16. How close to the banks of the creek will the thinning and removal take place?

Two thirds of the fuel break will be outside of the 100’ riparian corridor. Special precautions will be made for the areas that fall within the 100’ riparian corridor.

Additionally, for the portion of the shaded fuel break that is within the riparian area, the 100ft. recommended cut will be minimized as it is not as necessary given the higher fuel moistures in this area as well as the existing shade.
17. Will an Environmental Impact Statement be prepared for this project?

No. The road corridor is exclusively owned and managed by Salt Lake City Corporation. A federal Environmental Impact Statement or Environmental Assessment for the NEPA process is not required for privately owned land. However, similar information will be generated from ecological assessments, and that information will be available to the public.

18. What is the main source of funding for this project? Will funding for fire mitigation projects be allocated each year?

Currently available funds for this project are from the Salt Lake City Public Utilities budget ($85,000), supplemented by a grant from the Invasive Species Mitigation Fund ($15,000) awarded to the City by the State of Utah.

19. Why isn't the vegetation being cut on both sides of the road?

As proposed the project priority is to manage the south facing slopes first. These slopes are outside of the stream corridor and have low moisture content, making them drier and more likely and able to burn. The shaded fuel break may need to be extended on the creek side of the road, but a shaded fuel break on the creek side of the road is not of immediate concern.

20. How will day-to-day operation work?

The project proposal outlines that the contracted vegetation removal specialists provide daily traffic direction and safety signage. It is proposed that cutting begin in the lower canyon and move up canyon each day. As fuels are cut they will be chipped and left on site, or removed from the canyon. It is anticipated that Salt Lake City Watershed Division staff will monitor the process.

21. What about springs and sensitive areas?

The shaded fuel break is a selective process that would allow for variations in the size of the swath to avoid sensitive areas and riparian segments that hold more moisture and do not greatly contribute to fire.

22. Which methods will be used for eliminating the cut materials?

Some downed wood would be chipped and left on site; excess chipped material would be stored for use in the parks and on revegetation projects in the City, some larger materials may be transported from the canyon to the landfill for composting.

23. Is this project plan part of a commercial timber harvest?

No. This project is exclusively intended to increase public safety in the event of a wildfire in the canyon as well as protect the canyon watershed from catastrophic fires.
24. Has this project been designed to favor hunters using the canyon?

The proposed project is by no means intended to favor hunters but to increase general public safety in the canyon. Hunting along the road corridor is prohibited by long standing laws and the Watershed Division works continuously to enforce these laws. State law prohibits hunting (including with bow and arrow) within 200 yards of a road. Salt Lake County law disallows discharge of firearms (rifles, pistols, etc.) within one mile of any permanently inhabited structure, although this does not include bow and arrow. As such, no hunting of any type is allowed anywhere within the proposed shaded fuel break.

25. Which government and non-government entities are currently involved in the process of developing this project?

While the decision is ultimately upon Salt Lake City Corporation, it has relied on expertise and input from these agencies to create a work plan for this project:

a. Unified Fire Authority
b. Utah Division of Forestry Fire and State Lands
c. United States Forest Service

26. Will vegetation removal increase erosion?

Cutting vegetation is done selectively in a manner that favors preserving the ability of vegetation to hold the soil. The ground cover and low lying shrubs are not eliminated in this break, only trees. This cut is not a blanket cut that indiscriminately removes all vegetation, nor is it a clear cut. As such, the cut will not increase erosion.

27. Is this fuel break being created to ultimately protect private homes?

No. If a fire were to start on that side of the road, given typical fire behavior it would never threaten homes or houses which are far away from most of this ridge. A majority of the land heading towards the ridge is either owned by Salt Lake City Corporation or the Uinta-Wasatch-Cache National Forest.

This shaded fuel break will protect both the safety of the public as well as those working in the canyon, including fire fighters and treatment plant employees.

28. Will herbicide be used for vegetation suppression with the shaded fuel break?

Herbicide application will not be used as a method for vegetation removal for the shaded fuel break, but is necessary to selectively control the noxious weed infestations along the road corridor. It is anticipated, however, that spreading chipped wood from the break along the roadside will temporarily suppress a great deal of these infestations.
29. How, and by which means, has the public outreach process been managed by the Salt Lake City Department of Public Utilities?

► Aug 2008    City Weekly Article (post City Creek Fire 2008)
► Sep 2008    Greater Avenues Community Council Presentation
► Jan 2009    SLC Public Utilities Annual Report (Full Page w/photo)
► Feb 2009    Presentation to SLC Community Council Chairs
              Notice posted @ Mouth of City Creek Canyon
              Notice posted on SLC DPU Website
► Mar 2009    Press release to Community Council Chairs
              Greater Avenues Community Council newsletter
              Public Utilities Advisory Council Meeting Presentation
              Press Release – 138 email addresses 4 languages
► Apr 2009    Greater Avenues Community Council Presentation
              • Salt Lake Tribune article
              • Deseret News article
              • Open House seeking public input