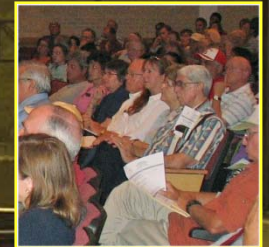




ALAMO RMA
Alamo Regional Mobility Authority



Information on an Environmental Study



Alamo RMA Commitment to Our Community

- Provide **local leadership and control** over transportation projects to keep our economy moving
- **Accelerate** the construction of needed multi-modal transportation projects to address quality of life issues
- **Leverage** federal, state, regional and local funds through the use of all available funding tools
- Ensure that motorists **will always have a choice** between tolled and non-tolled lanes, and work to develop other multi-modal projects to help keep our region moving
- Increase **travel safety** for our community by decreasing congestion



Why do you have to do an environmental study before you can start building a road project?



National Environmental Policy Act (NEPA)

On January 1, 1970 the National Environmental Policy Act of 1969 (NEPA) was signed into Law. NEPA established a national environmental policy intentionally focused on Federal activities and the desire for a sustainable environment balanced with other essential needs of present and future generations of Americans.

NEPA established a supplemental mandate for Federal agencies to consider the potential environmental consequences of their proposals, document the analysis, and make this information available to the public for comment prior to implementation. The environmental protection policy established in NEPA, Section 101, is supported by a set of "action forcing" provisions in Section 102 that form the basic framework for Federal decisionmaking and the NEPA process.

While NEPA established the basic framework for integrating environmental considerations into Federal decisionmaking, it did not provide the details of the process for which it would be accomplished. Federal implementation of NEPA was the charge of the Council on Environmental Quality (CEQ), which interpreted the law and addressed NEPA's action forcing provisions in the form of regulations and guidance.

From the Federal Highway Administration website – <http://www.environment.fhwa.dot.gov>



The Federal Highway Administration (FHWA) and NEPA

NEPA requires, to the fullest extent possible, that the policies, regulations, and laws of the Federal Government be interpreted and administered in accordance with its environmental protection goals. NEPA also requires Federal agencies to use an interdisciplinary approach in planning and decisionmaking for any action that adversely impacts the environment.

NEPA requires and FHWA is committed to the examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed transportation projects. In addition to evaluating the potential environmental effects, we must also take into account the transportation needs of the public in reaching a decision that is in the best overall public interest. The FHWA NEPA project development process is an approach to balanced transportation decisionmaking that takes into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation.

From the Federal Highway Administration website – <http://www.environment.fhwa.dot.gov>



What types of environmental studies can be undertaken for transportation projects?



Levels of Environmental Review and Documentation

The National Environmental Policy Act (NEPA) authorizes three levels of environmental review and documentation

- Categorical Exclusion
- Environmental Assessment
- Environmental Impact Statement



Levels of Environmental Review and Documentation

- **Categorical Exclusion**

Categorical exclusion means a category of actions which do not individually or cumulatively have a significant effect on the human environment ... and ... for which, therefore, neither an environmental assessment nor an environmental impact statement is required.

-- 40 CFR 1508.4

Categorical exclusions (CEs) are actions which meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions which: do not induce significant impacts to planned growth or land use for the area, do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; and do not otherwise, either individually or cumulatively, have any significant environmental impacts.

-- 23 CFR 771.117(a)

From the Federal Highway Administration website - <http://www.environment.fhwa.dot.gov/>



Levels of Environmental Documentation

■ Environmental Assessment

When the significance of impacts of a transportation project proposal is uncertain, an environmental assessment (EA) is prepared to assist in making this determination. If it is found that significant impacts will result, the preparation of an environmental impact statement (EIS) should commence immediately.

An EA -

- Means a concise public document for which a Federal agency is responsible that serves to:
- Briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.
- Aid an agency's compliance with the Act when no environmental impact statement is necessary.
- Facilitate preparation of a statement when one is necessary.
- Shall include brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.

-- 40 CFR 1508.9

From the Federal Highway Administration website - <http://www.environment.fhwa.dot.gov/>



Levels of Environmental Documentation

- Environmental Impact Statement

NEPA requires Federal agencies to prepare environmental impact statements (EISs) for major Federal actions that significantly affect the quality of the human environment. An EIS is a full disclosure document that details the process through which a transportation project was developed, includes consideration of a range of reasonable alternatives, analyzes the potential impacts resulting from the alternatives, and demonstrates compliance with other applicable environmental laws and executive orders. The EIS process is completed in the following ordered steps: Notice of Intent (NOI), draft EIS, final EIS, and record of decision (ROD).

From the Federal Highway Administration website - <http://www.environment.fhwa.dot.gov/>



Levels of Environmental Documentation

- **Environmental Impact Statement (Continued)**

The NOI is published in the Federal Register by the lead Federal agency and signals the initiation of the process. Scoping, an open process involving the public and other Federal, state and local, agencies, commences immediately to identify the major and important issues for consideration during the study. Public involvement and agency coordination continues throughout the entire process. The draft EIS provides a detailed description of the proposal, the purpose and need, reasonable alternatives, the affected environment, and presents analysis of the anticipated beneficial and adverse environmental effects of the alternatives. Following a formal comment period and receipt of comments from the public and other agencies, the FEIS will be developed and issued. The FEIS will address the comments on the draft and identify, based on analysis and comments, the "preferred alternative".



Categorical Exclusion

- The Proposed US 281 / Loop 1604 Interchange project has been classified as a categorical exclusion based on the improvements to safety and operational conditions within the proposed project limits.



What is examined as part of the Categorical Exclusion?

- Potential Air Quality Impacts
- Potential Noise Impacts
- Potential impacts to endangered species habit
- Potential impacts to wetlands
- Potential impacts to historical sites and archeological sites
- Potential impacts to the Edwards Aquifer



Examples of what information is considered as part of the environmental study for any transportation project to determine the potential impacts from the proposed project



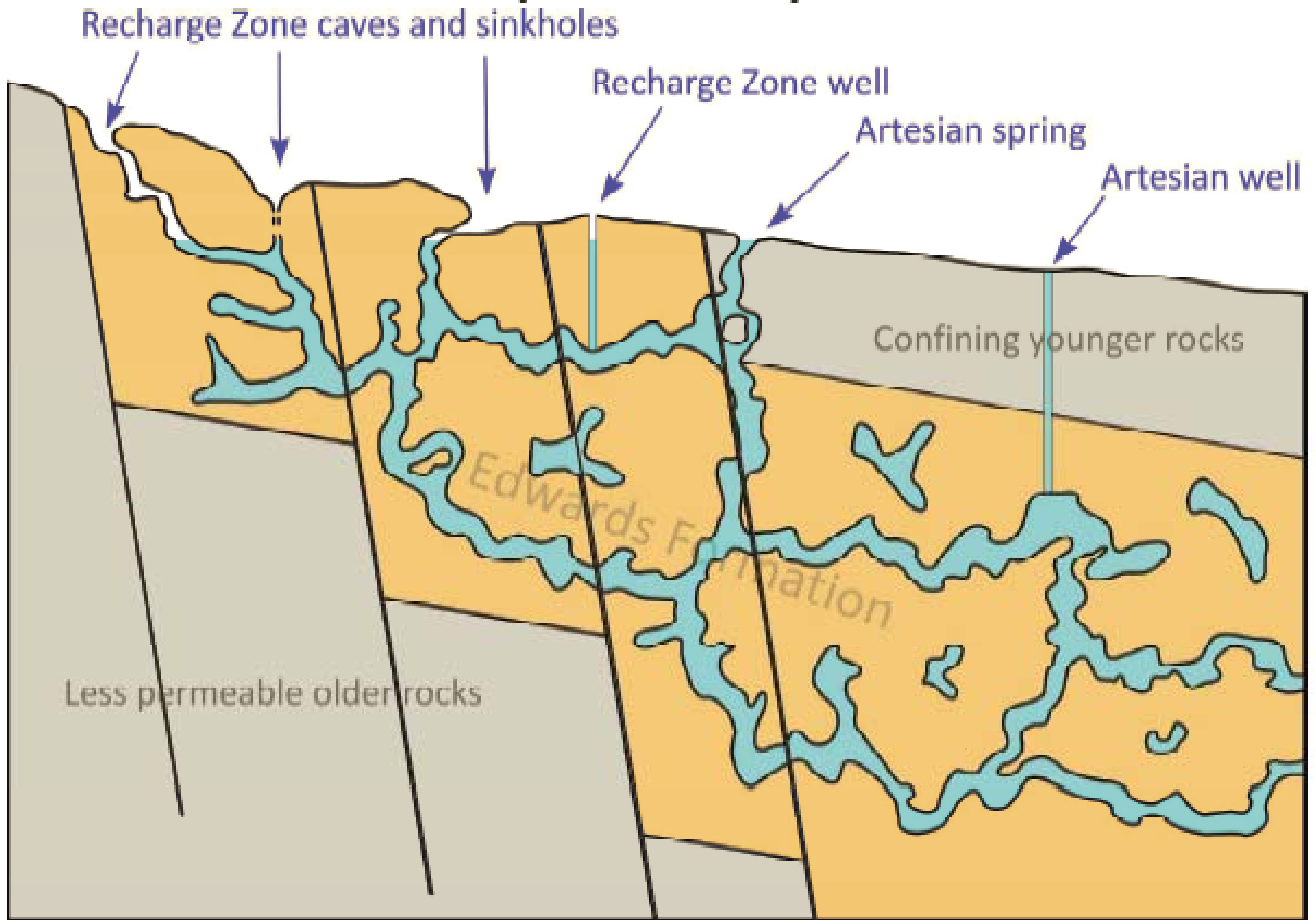
Aquifer Issues

What is an aquifer anyway?

An aquifer is a natural underground reservoir that provides an important water source for people. The Edwards aquifer is a karst aquifer which underlies much of central Texas and is the primary source of water for over 1.7 million people.



Edwards Aquifer Conceptual Model



Karst Issues

Karst is the word used to characterize terrain where water has dissolved part of the limestone bedrock, creating conduits in the rock (fissures, cracks, sinkholes, caves , etc). Karst aquifers are very sensitive because these conduits carry water from rain and streams directly into the aquifer (this is called **recharge**). This conduit flow does not filter out contaminants before they reach the aquifer.



Aquifer Life

Several aquatic creatures also depend on the Edwards aquifer as their sole-source of water. Some of these are threatened or endangered species.



Air Quality Issues

Carbon Monoxide is an air pollutant whose main source is vehicle exhaust. It also comes from natural processes such as volcanoes and wildfires and other manmade sources such as industrial processes, fossil fuel-fed power production.

Exposure to high levels of carbon monoxide poses serious health risks. In the atmosphere, carbon monoxide interacts with other elements to form methane and ozone.

Ozone is a ground-level air pollutant that is harmful to respiratory health and is the main component of smog. Ozone also acts as a greenhouse gas in the upper atmosphere.

From 2004 to 2006 Bexar County was in non-attainment with the EPA's National Ambient Air Quality Standards for Ozone. Through regional and state efforts, attainment in Bexar County was achieved in April 2008.

The EPA passed a more stringent standard for ozone in 2008 which will go into effect in 2010. Based on preliminary EPA projections, Bexar County's ozone levels should meet this new standard through 2020.

Source: Environmental Protection Agency & Texas Commission on Environmental Quality



MOBILE SOURCE AIR TOXICS (MSAT)

Mobile Source Air Toxics are pollutants that are emitted from mobile sources such as cars, trucks, buses, and motorcycles and can pose health risks to the general community at high levels.

The MSAT chemicals to be analyzed for the EIS include:



- Benzene
- Formaldehyde
- Acetaldehyde
- Diesel particulate matter/
diesel exhaust organic gases
- Acrolein
- 1,3-butadiene

Threatened and Endangered Species



Golden-cheeked Warbler (*Dendroica chrysoparia*)

- Nests only in central Texas mixed Ashe-juniper and oak woodlands, in ravines and canyons.
- They spend the winter in Mexico and Central America then come to Texas in March to nest and raise their young. The Golden-cheeked warbler is the only species that nests exclusively in Texas.
- Listed Endangered May 4, 1990, as a result of long term habitat loss, as mature woodlands have been cleared for development or to grow crops or hay.



Black-capped Vireo (*Vireo atricapilla*)

- Nests in Texas April through July and spend the winter on the western coast of Mexico.
- They build their nests in low branches of shrubs or trees, like shin oak or sumac, which grow in scattered clumps separated by open grassland.
- Vireos return year after year to the same nesting area, and both parents incubate the eggs and feed the chicks.
- Listed Endangered October 6, 1987, as a result of habitat loss and cowbird nest parasitism.



Threatened and Endangered Species



Photograph by Dr. Jean Krejca

Karst Invertebrates (shown: *Rhadine infernalis* [no common name])

- Invertebrates are animals without internal skeletons or backbones such as butterflies, beetles, grasshoppers and spiders.
- Nine species known only from northern Bexar County were listed as endangered December 21, 2000., including three beetles, five spiders, and one harvestman (a relative of the common household daddy-longlegs).
- Although they are small and seldom seen, spending their entire lives underground, these invertebrates are biologically and ecologically unique.



Photograph by Dr. Glenn Longley

Aquifer Species (shown: Texas Blind Salamander [*Eurycea rathbuni*])

- Over 40 species of highly adapted, aquatic, subterranean species are known to live in the Edwards Aquifer. These include amphipod crustaceans, gastropod snails, and invertebrates.
- Six aquatic species are listed as endangered in the Edwards Aquifer system. These include two fish, two beetles, one amphipod, and one plant (Texas wild rice). Another salamander is listed as Threatened.
- The main problems for all the species are reduced spring flows caused by increased pumping, elimination of habitat, and degradation of water quality caused by urban expansion.



Historic Properties

The National Historic Preservation Act, Section 106



The National Historic Preservation Act protects historic properties in the United States from federally funded or permitted projects. Section 106 of the act requires Federal agencies to evaluate the impact of their projects on historic properties through a process known as *Section 106 Review*.

What are “historic properties”?

- Buildings
- Structures
- Objects
- Districts
- Cemeteries
- Archeological
(and other) sites



Where does the public fit into this?

- Comments from tonight's Community Open House will be included as part of the record for the Categorical Exclusion being prepared for the US 281 / Loop 1604 Categorical Exclusion



If you have comments about the proposed US 281 / Loop 1604 interchange improvements -

You can do one or all of the following -

- ✓ Fill out a comment card and drop it off in any comment card box tonight
- ✓ Speak with the Court Reporter and have your comments included in the official record
- ✓ Send in your comments, via fax, email or postal mail – comments must be received by September 4, 2009 to be included in the official record for this open house



If you have comments about the proposed US 281 / Loop 1604 interchange improvements -

Mail your comments to

US 281 / Loop 1604 Interchange Project
Alamo Regional Mobility Authority
1222 N. Main Avenue, Ste 1000
San Antonio, Texas 78212

Email us at Interchange@AlamoRMA.org

Fax us at 210.495.5403 attention US 281 / Loop 1604
Interchange Project



Don't let tonight be all you hear about the proposed project - Stay Informed, Stay Involved!

Want to see more of the animation files?
Want to stay up to date on the proposed project? - Follow us online!

www.AlamoRMA.org

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This presentation will repeat

