DRAFT
ENVIRONMENTAL ASSESSMENT

CITY OF ROSEVILLE WATER METER RETROFIT PROGRAM
PLACER COUNTY, CALIFORNIA

August 2004

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

AUG 05 2004

Environmental Resources Branch

TO ALL INTERESTED PARTIES:

Enclosed for your review is the draft Environmental Assessment (EA) prepared for the City of Roseville Water Meter Retrofit Project, Placer County, California. The U.S. Army Corps of Engineers and the City of Roseville propose to replace 26,000 water meters in the residential areas of Roseville over a period of 11 years. This draft EA evaluates the potential effects of the proposed action on the environmental resources in the project area.

The public review period for this draft EA ends on August 21, 2004. Please send any comments to the U.S. Army Corps of Engineers, Environmental Planning Section, 1325 J Street, Sacramento, California 95814, Attn: Ms. Patti Johnson. All comments received on the draft EA will be considered and incorporated into the final EA, as appropriate. If you have any questions, Ms. Johnson can be reached at (916) 557-6611 or by e-mail at patti.p.johnson@usace.army.mil.

Sincerely,

E. Scott Clark

Mark C. Charlton, P. E.
Chief, Planning Division

Enclosure

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

REPLY TO
ATTENTION OF

DRAFT
FINDING OF NO SIGNIFICANT IMPACT
CITY OF ROSEVILLE WATER METER RETROFIT PROJECT
PLACER COUNTY, CALIFORNIA

I have reviewed and evaluated the information presented in the Environmental Assessment (EA) for the City of Roseville Water Meter Retrofit Project, Placer County, California. This project would entail the replacement of 26,000 existing water meters in the City of Roseville residential areas. This project is in response to the Central Valley Project Improvement Act, signed in 1992, and the Water Forum Agreement. Section 219(f)(23) of WRDA 1992, as amended, authorized the Corps to provide technical, planning, design, and construction assistance to Placer County, El Dorado County, and San Juan Suburban Water District, associated with environmental infrastructure improvements, supporting regional water conservation and recycling in the amount of $35,000,000.

During this review, the possible consequences of the work described in the EA have been studied with consideration given to environmental, economic, social, and installation feasibility. In evaluating the effects of the proposed project, specific attention has been given to significant environmental conditions that could potentially be affected. I have also considered the views of other interested agencies, organizations, and individuals concerning the proposed project.

Based on my review of the EA and my knowledge of the project area, I am convinced that the proposed project is a logical and desirable alternative. Furthermore, I have determined that the project would have no significant, long-term effects on the environment. All installation will be implemented in strict compliance with applicable Federal, State, and local laws and regulations. Based on the results of the environmental evaluation and completion of public review, I have determined that the EA and Finding of No Significant Impact provide adequate documentation and that no further environmental document is required.

Ronald N. Light
Colonel, Corps of Engineers
District Engineer

CONTENTS

1.0 PURPOSE AND NEED....1
1.1 Proposed Action....1
1.2 Location of the Project Area....1
1.3 Need for Proposed Action....1
1.4 Project Authorization....1
1.5 Purpose of the Environmental Assessment....1

2.0 ALTERNATIVES....2
2.1 No Action....2
2.2 Retrofit Alternative (Preferred Alternative)....2

3.0 AFFECTED RESOURCES AND ENVIRONMENTAL EFFECTS....2
3.1 Resources Not Considered in Detail....2
3.1.1 Land Use and Socioeconomics....2
3.1.2 Environmental Justice....3
3.1.3 Hazardous, Toxic, and Radiological Waste....3
3.1.4 Vegetation and Wildlife....3
3.1.5 Special Status Species....3
3.1.6 Water Resources and Quality....3
3.1.7 Esthetics/Recreation....3
3.1.8 Cultural Resources....4
3.2 Air Quality....4
3.3 Noise....4
3.4 Traffic....4

4.0 CUMULATIVE AND GROWTH-INDUCING EFFECTS....5
4.1 Cumulative Effects....5
4.2 Growth-Inducing Effects....5

5.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS....5

6.0 PUBLIC INVOLVEMENT....6

7.0 COORDINATION AND REVIEW OF THE EA....6

8.0 CONCLUSIONS....6

PLATES

1. Vicinity Map
2. City of Roseville Land Use Map Showing Residential Areas
3. Typical Cross Section of Meter Installation

APPENDIX

A. List of Special Status Species from the U.S. Fish and Wildlife Service

1.0 PURPOSE AND NEED

1.1 Proposed Action

The proposed action is to replace 26,000 existing water meters in the City of Roseville residential areas with more efficient water meters. The retrofits would be for meters that are out of warranty or over 10 years in service.

1.2 Location of the Project Area

The project area is located within the boundaries of the City of Roseville, Placer County, California, within developed residential areas (Plates 1 and 2).

1.3 Need for Proposed Action

Existing water meters are obsolete and allow an inaccurate measurement of water use. The Central Valley Project Improvement Act (CVPIA) signed in 1992 and Water Forum Agreement require that by 2005, water meters be newly installed or replaced, as appropriate, as part of an overall conservation program. In response, the City of Roseville developed the Water Meter Retrofit Program, an 11-year program under which approximately 26,000 existing services will be retrofit. Meters will be installed on a neighborhood-by-neighborhood basis. Meter installations are not limited to single-family dwellings, but include all residential use types. On average, the City will complete 3,655 retrofit actions annually.

1.4 Project Authorization

Section 219(f)(23) of the Water Resources Development Act of 1992, as amended, authorized the Corps to provide technical, planning, design, and construction assistance to Placer County, El Dorado County, and San Juan Suburban Water District, associated with environmental infrastructure improvements, supporting regional water conservation and recycling in the amount of $35 million. In Fiscal Years 03 and 04, Congress appropriated funds for the Corps to assist the City of Roseville with implementation of the water conservation program. The non-Federal sponsor for the project is the City of Roseville, Placer County, California.

1.5 Purpose of the Environmental Assessment

The Environmental Assessment (EA) discusses the environmental resources in the project area, evaluates the effects of the alternatives (including the proposed action) on the resources, and proposes measures to avoid, minimize, or mitigate any adverse effects to a less than significant level. This EA is in compliance with the National Environmental Policy Act and provides full public disclosure of the effects of the proposed action.

2.0 ALTERNATIVES

A no-action alternative and a retrofit alternative were evaluated for comparison.

2.1 No Action

Under this alternative, the existing water meters would remain. The inefficiency of these meters would continue to allow inaccurate measurement of water use. The City of Roseville would be out of compliance with the CVPIA of 1992 and the Water Forum Agreement.

2.2 Retrofit Alternative (Preferred Alternative)

Under this alternative, 26,000 existing water meters in the City of Roseville residential areas would be replaced with more efficient water meters. Of those 26,000, 11,900 are full-meter retrofits (meter and meter box); 3,700 are partial retrofits (meter only); and 11,000 are existing up-to-date meters that require installation of an electronic sensor (PitERT remote read heads).

For each meter, a City of Roseville work crew of one to two persons would proceed first by shutting off water from the street side to the meter temporarily to allow replacement of the existing meter. The existing meter would then be disconnected from its couplings in the water line. The new meter would be installed in place. The electronic sensors require only attachment to existing meters. Plate 3 shows a cross section of the meter installation.

3.0 AFFECTED RESOURCES AND ENVIRONMENTAL EFFECTS

This section describes the resources in the project area, as well as any effects of the alternatives on those resources. When necessary, mitigation measures are also proposed to avoid, reduce, minimize, or compensate for any significant effects.

3.1 Resources Not Considered in Detail

Initial evaluation of the effects of the project indicated that effects to several resources would be absent, minimal, or short term. These resources are discussed below to add to the overall understanding of the project area.

3.1.1 Land Use and Socioeconomics

The project area is completely urbanized with single and multiple dwelling units. Replacement of the water meters would be at the specific site where each meter is currently located. Since this is a developed residential area, it is expected that the land use and socioeconomic composition of the area would remain as it is presently.

3.1.2 Environmental Justice

As directed in Executive Order 12898, all Federal agencies must identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. Replacement of water meters is a 10-year program that affects all residential owners who have meters with expired warranties or that are over 10 years old. Residents who qualify under low-income criteria could participate in the City's low-income assistance program, which would provide a 50 percent reduction in the monthly surcharge.

3.1.3 Hazardous, Toxic, and Radiological Waste

Replacing existing water meters with new ones would not involve use of hazardous materials such as fuels, adhesives, or solvents that would be unsuitable around domestic water supplies.

3.1.4 Vegetation and Wildlife

All vegetation is exotic and consists of lawns, trees, landscaping, and other elements of the artificial environment associated with residential development.

3.1.5 Special Status Species

The updated (July 19, 2004) U.S. Fish and Wildlife special status species list was consulted, and no plants or animals are shown for the project area (Appendix A). It is unlikely that suitable habitat would be found at any of the meter locations or in the immediate vicinity.

3.1.6 Water Resources and Quality

Water sources are the domestic water piped water through the residential area for human use. The project would disrupt the water supply at each residential dwelling only temporarily as the meter is being replaced. Water quality would not likely be affected.

3.1.7 Esthetics/Recreation

The project area is a fully developed suburban area with neighborhood parks. Water meters already exist at each residence. No new utility structure would be constructed under this project. Temporary changes in the viewshed during replacement of the meters would be consistent with other residential activity. No recreational facilities or activities would be disrupted by the project.

3.1.8 Cultural Resources

The project area underwent many changes during the development of the subdivisions. Retrofitting each meter is a very localized effort that would occur at each existing meter. The Area of Potential Effect would be limited to each meter and its immediate vicinity. There are no cultural resources eligible for or listed on the National Register of Historic Places that would be affected by the project.

3.2 Air Quality

Air quality is regulated by the Sacramento Metropolitan Air Quality Management District (SMAQMD). The City of Roseville is within the Sacramento Valley Air Basin. (SVAB). According to the Placer County Transportation Planning Agency, all of Placer County is a nonattainment area for the State particulate (PM10) standards. Southern Placer County is classified as a nonattainment area for the Federal carbon monoxide (CO) standard. Ozone precursors, reactive organic gas (ROG) and nitrogen oxides (NO_3) are generated by vehicle emissions. Sensitive receptors would include residents.

The proposed project would not expected to have any significant effects on air quality. The City of Roseville would use their own utility vehicles, which are already required to meet emission controls.

3.3 Noise

The primary sources of noise in the project area are from the operation of motor vehicles and natural sounds such as wind and wildlife. Noise-sensitive receptors in the area include residents, visitors, and wildlife.

Noise could emanate from the utility trucks or vans used to bring the meters and hand tools to the site, and from the replacement of the meters. However, this increase in noise would be temporary and would not be expected to exceed the City of Roseville's local noise ordinance for residential areas. All work would be accomplished during the weekdays and during regular working hours. As a result, the proposed project would not have any significant effects on noise.

3.4 Traffic

The types of traffic in the project area includes primarily cars and small utility vehicles. The volume of traffic is limited to residents and associated local traffic.

Work would most likely be accomplished by only one- or two- person crews. A utility truck or van containing the replacement meters would be used to carry the meters to each site. Since the project area is a residential area, the use of a service truck or van would not have a significant effect on traffic on the residential streets.

4.0 CUMULATIVE AND GROWTH-INDUCING EFFECTS

4.1 Cumulative Effects

Cumulative effects are those of the proposed project considered with other current or reasonably foreseeable projects in the project area. Cumulatively, this project would allow more efficient monitoring of water use and would call attention to water use that does not meet the objectives of the CVPIA and Water Forum Agreement. This project would have a beneficial effect because it would promote water conservation.

4.2 Growth-Inducing Effects

This project would not promote growth since the area is already completely developed and the project purpose is to replace inefficient water meters with more effective water meters.

5.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Clean Air Act, as amended and recodified (42 U.S.C. 7401 et seq.) *Compliance.* The proposed project is not expected to violate and Federal or State air quality standards, or hinder the attainment of air quality objectives in the Sacramento Valley Air Basin. The Corps has determined that the proposed project would have no significant adverse effects on the future air quality of the area.

Clean Water Act (33 U.S.C. 1251 et seq.) *Compliance.* The project would not affect water quality since the project consists only of replacing existing water meters in the domestic water supply to each residential unit. The project would comply with appropriate State and local codes regarding public water systems.

Endangered Species Act (16 U.S.C. 1531 et seq.) *Compliance.* No Federally listed species or their habitats have been identified in or near the project area. The project will have no effect on special status species.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations. *Compliance.* The order directs all Federal agencies to identify and address adverse human health or environmental effects of their programs, policies, and activities on minority and low-income populations. The proposed project is intended for all meters at residential dwellings in the City of Roseville meeting the criteria of expired warranties or 10 years of age. Low-income residents would be offered reduced fee rates for the meter installation.

National Environmental Policy Act (42 U.S.C. 4321 et seq.) *Partial Compliance.* This draft EA and the accompanying Finding of No Significant Impact (FONSI) are in partial compliance with this act. Any public comments received on the draft EA will be incorporated into the final EA, as appropriate.

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 et seq.) *Compliance.* The Area of Potential Effect is limited to the location of each meter, which has already been disturbed extensively by the placement of the original water system and meter. Corps archeological staff have reviewed the project and have determined that no cultural resources would be affected by this project.

6.0 PUBLIC INVOLVEMENT

The City of Roseville has undertaken public outreach to inform residents about the purposes of the program, its costs and benefits, and sources of information. The City's website describes the program and provides answers to frequently asked questions. Video presentations on the program are available at the Roseville Public Library. The local government TV channel carries information periodically about the progress of the program. A metering brochure would be distributed when the work crews begin meter installation in a given neighborhood. An installation schedule is available on the City's website.

7.0 COORDINATION AND REVIEW OF THE DRAFT EA

This draft EA and FONSI will be made available for 15 days for public review. Placement on the Corps' website will reach the greatest number of individuals, agencies, and organizations. All comments received will be considered and incorporated into the final EA, as appropriate.

8.0 CONCLUSIONS

Based on the information in this EA, the proposed project would have no significant adverse effects on the environment, and no mitigation beyond best management practices would be required. In addition, the proposed project would meet the requirements for actions permitted following completion of a FONSI as described in 40 CFR 1508.13. These actions would not have a significant effect on the quality of the human environment and do not require preparation of an environmental impact statement. Therefore, a draft FONSI has been prepared and accompanies this draft EA.

9.0 REFERENCES

City of Roseville. 2004. Proposed Noise Regulation, Title 9, Health and Safety, Chapter 9.24, Roseville, CA.

Placer County. 2004. 2022 Regional Transportation Plan, Chapter XV, Air Quality Conformity Element. Transportation Planning Agency, Roseville, CA.

APPENDIX A

County Lists

Placer County

Listed Species

Invertebrates

- Critical habitat, vernal pool invertebrates (X)
Branchinecta lynchi - Critical habitat, vernal pool fairy shrimp (X)
Branchinecta lynchi - vernal pool fairy shrimp (T)
Desmocerus californicus dimorphus - valley elderberry longhorn beetle (T)
Lepidurus packardi - vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus - delta smelt (T)
Oncorhynchus (=Salmo) clarki henshawi - Lahontan cutthroat trout (T)
Oncorhynchus mykiss - Central Valley steelhead (T) (NMFS)
Oncorhynchus tshawytscha - Central Valley spring-run chinook salmon (T) (NMFS)
Oncorhynchus tshawytscha - winter-run chinook salmon (E) (NMFS)

Amphibians

Rana aurora draytonii - California red-legged frog (T)

Reptiles

Thamnophis gigas - giant garter snake (T)

Birds

Haliaeetus leucocephalus - bald eagle (T)

Proposed Species

Amphibians

Ambystoma californiense - California tiger salamander (PT)

Candidate Species

Fish

Acipenser medirostris - green sturgeon (C)

Amphibians

Rana muscosa - mountain yellow-legged frog (C)

Birds

Coccyzus americanus occidentalis - Western yellow-billed cuckoo (C)

Mammals

Martes pennanti - fisher (C)

Plants

Botrychium lineare - slender Moonwort (= narrowleaf grapefern) (C)
Rorippa subumbellata - Tahoe yellow-cress (C)

Species of Concern

Invertebrates

Capnia lacustra - Lake Tahoe benthic stonefly (SC)
Goeracea oregona - Sagehen Creek goracean caddisfly (SC)
Linderiella occidentalis - California linderiella fairy shrimp (SC)
Megaleuctra sierra - Shirttail Creek stonefly (SC)
Nebria darlingtoni - South Forks ground beetle (SC)
Rhyacophila spinata - spiny rhyacophilan caddisfly (SC)

Fish

Lampetra ayresi - river lamprey (SC)
Lampetra tridentata - Pacific lamprey (SC)
Pogonichthys macrolepidotus - Sacramento splittail (SC)

Amphibians

Hydromantes platycephalus - Mount Lyell salamander (SC)
Rana boylii - foothill yellow-legged frog (SC)
Spea hammondii - western spadefoot toad (SC)

Reptiles

Clemmys marmorata marmorata - northwestern pond turtle (SC)
Clemmys marmorata pallida - southwestern pond turtle (SC)
Phrynosoma coronatum frontale - California horned lizard (SC)

Birds

Accipiter gentilis - northern goshawk (SC)
Agelaius tricolor - tricolored blackbird (SC)
Athene cunicularia hypugaea - western burrowing owl (SC)
Baeolophus inornatus - oak titmouse (SLC)
Botaurus lentiginosus - American bittern (SC)
Branta canadensis leucopareia - Aleutian Canada goose (D)
Buteo regalis - ferruginous hawk (SC)
Buteo Swainsoni - Swainson's hawk (CA)
Carduelis lawrencei - Lawrence's goldfinch (SC)
Chaetura vauxi - Vaux's swift (SC)
Charadrius montanus - mountain plover (SC)
Cinclus mexicanus - American dipper (SLC)
Contopus cooperi - olive-sided flycatcher (SC)
Cypseloides niger - black swift (SC)
Empidonax traillii brewsteri - little willow flycatcher (CA)
Falco peregrinus anatum - American peregrine falcon (D)
Histrionicus histrionicus - Harlequin duck (SC)
Melanerpes lewis - Lewis' woodpecker (SC)
Numenius americanus - long-billed curlew (SC)
Otus flammeolus - flammulated owl (SC)
Picoides albolarvatus - white-headed woodpecker (SC)
Picoides nuttallii - Nuttall's woodpecker (SLC)
Plegadis chihi - white-faced ibis (SC)
Riparia riparia - bank swallow (CA)
Selasphorus rufus - rufous hummingbird (SC)
Sphyrapicus ruber - red-breasted sapsucker (SC)
Strix occidentalis occidentalis - California spotted owl (SC)
Toxostoma redivivum - California thrasher (SC)

Mammals

Corynorhinus (=Plecotus) townsendii pallescens - pale Townsend's big-eared bat (SC)
Corynorhinus (=Plecotus) townsendii townsendii - Pacific western big-eared bat (SC)
Euderma maculatum - spotted bat (SC)
Eumops perotis californicus - greater western mastiff-bat (SC)
Gulo gulo luteus - California wolverine (CA)
Lepus americanus tahoensis - Sierra Nevada snowshoe hare (SC)
Martes americana - American (=pine) marten (SC)
Myotis ciliolabrum - small-footed myotis bat (SC)
Myotis evotis - long-eared myotis bat (SC)
Myotis thysanodes - fringed myotis bat (SC)
Myotis volans - long-legged myotis bat (SC)
Myotis yumanensis - Yuma myotis bat (SC)
Perognathus inornatus - San Joaquin pocket mouse (SC)
Vulpes vulpes necator - Sierra Nevada red fox (CA)

Plants

Arabis rigidissima var. demota - Carson Range rock cress (SC)
Balsamorhiza macrolepis var macrolepis - big-scale (=California) balsamroot (SLC)
Botrychium lunaria - common moonwort (SC)
Chlorogalum grandiflorum - Red Hills soaproot (SC)
Clarkia biloba ssp brandegeae - Brandegee's clarkia (SLC)
Cordylanthus mollis ssp. hispidus - hispid bird's-beak (SC)
Eriogonum umbellatum var. torreyanum - Donner Pass buckwheat (SC)
Fritillaria agrestis - stinkbells (SLC)

Fritillaria eastwoodiae - Butte fritillary (SC)
Gratiola heterosepala - Boggs Lake hedge-hyssop (CA)
Ivesia sericoleuca - Plumas ivesia (SC)
Juncus leiospermus var. ahartii - Ahart's (dwarf) rush (SC)
Legenere limosa - legenere (SC)
Lewisia longipetala - long-petaled lewisia (SC)
Lewisia serrata - saw-toothed lewisia (SC)
Phacelia stebbinsii - Stebbins' phacelia (SC)
Viola tomentosa - felt-leaved (=woolly) violet (SLC)

Key:

(E) *Endangered* - Listed (in the Federal Register) as being in danger of extinction.

(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.

(P) *Proposed* - Officially proposed (in the Federal Register) for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the National Marine Fisheries Service. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.

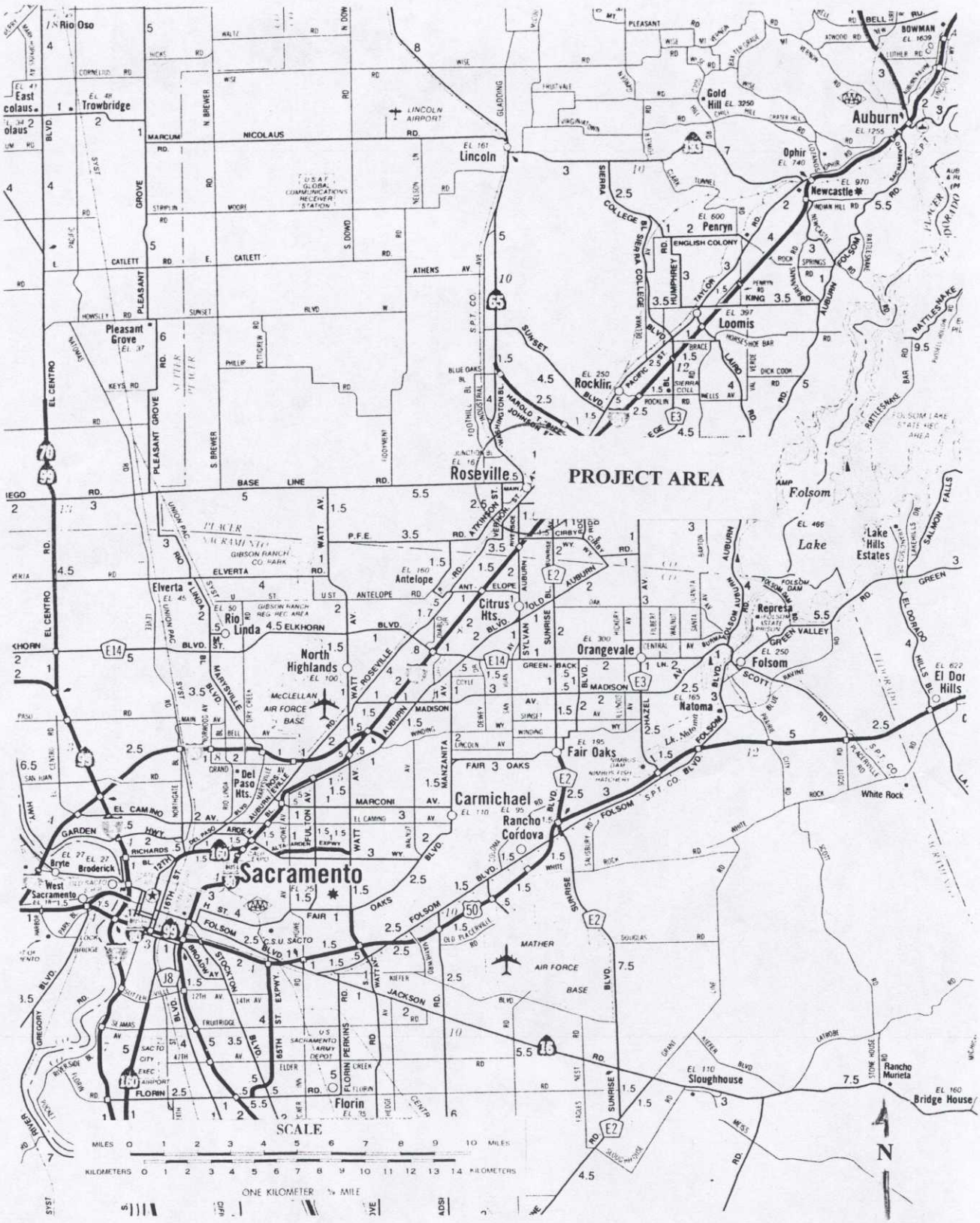
(C) *Candidate* - Candidate to become a proposed species.

(CA) Listed by the State of California but not by the Fish & Wildlife Service.

(D) *Delisted* - Species will be monitored for 5 years.

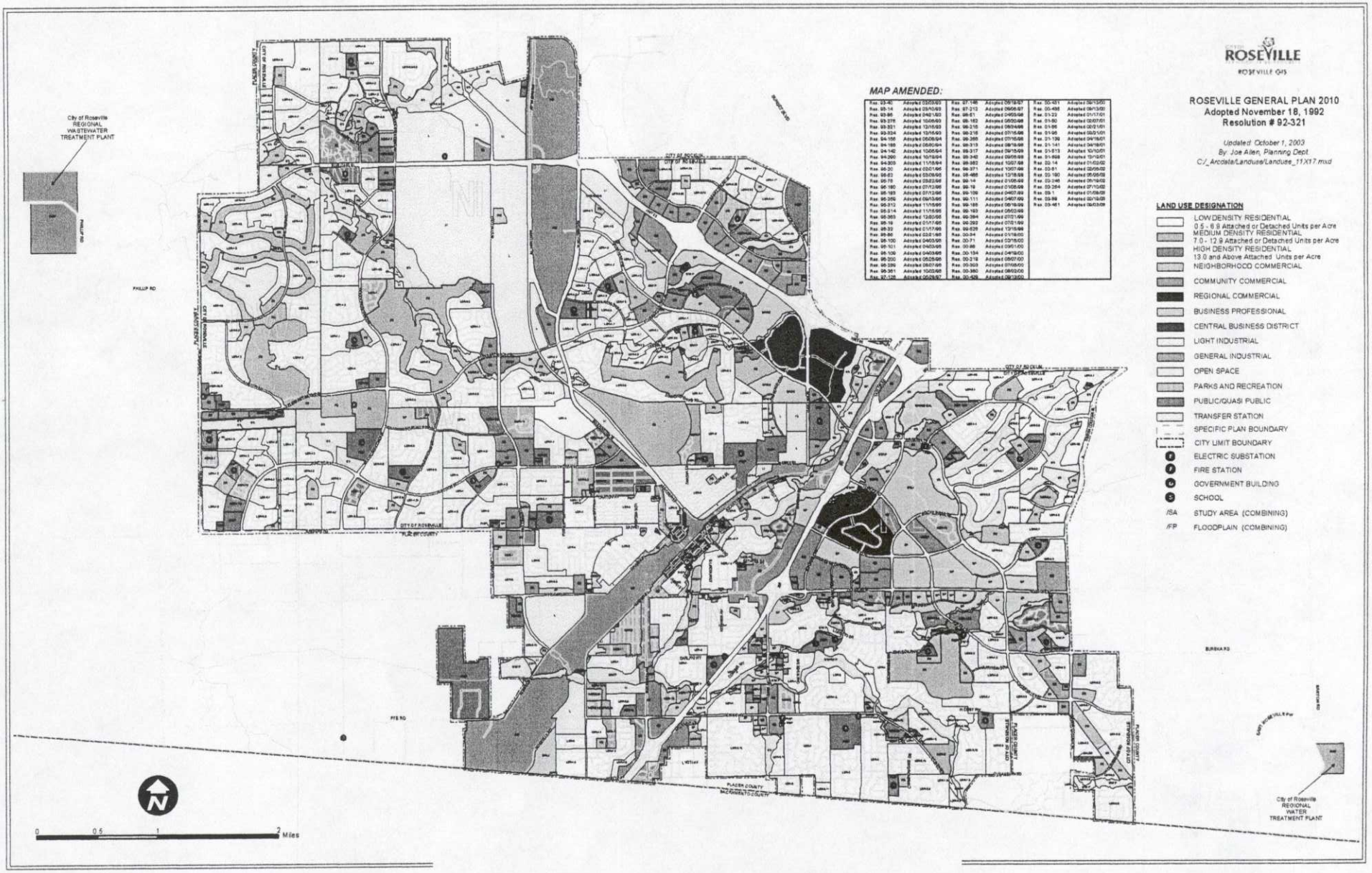
(SC) *Species of Concern*/(SLC) Species of Local Concern - Other species of concern to the Sacramento Fish & Wildlife Office.

(X) *Critical Habitat* designated for this species

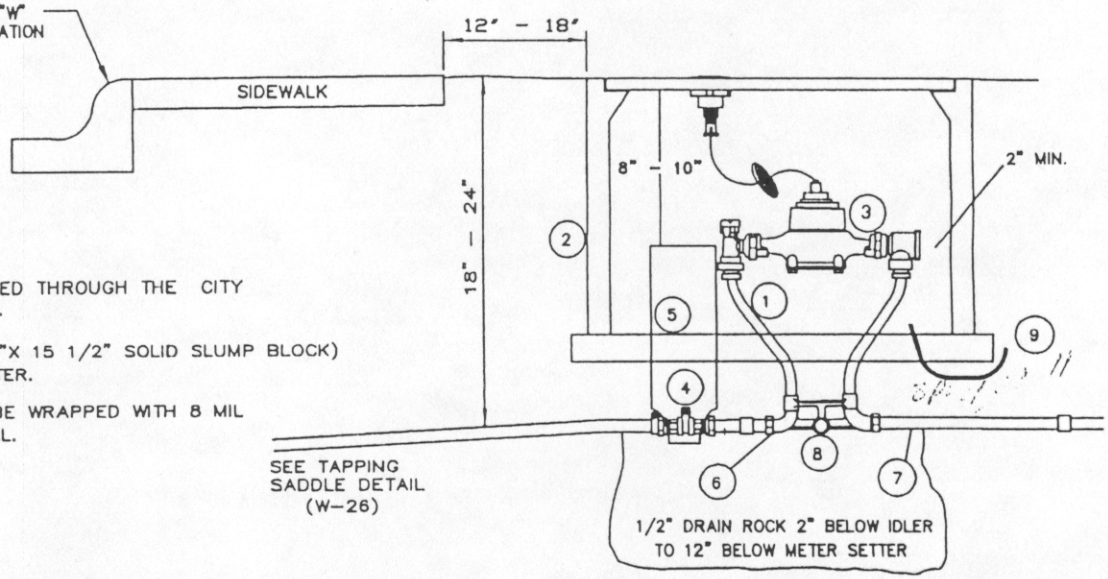


VICINITY MAP OF PROJECT AREA

PLATE 1



CITY OF ROSEVILLE LAND USE MAP
RESIDENTIAL AREAS



NOTES:

WATER METERS SHALL BE PURCHASED THROUGH THE CITY PURCHASE INCLUDES INSTALLATION.

INSTALL CONCRETE BLOCKING (4"X4"X 15 1/2" SOLID SLUMP BLOCK) UNDER ENTIRE UTILITY BOX PERIMETER.

BURIED PIPE AND FITTINGS SHALL BE WRAPPED WITH 8 MIL POLYETHYLENE OR APPROVED EQUAL.

1) METER SETTER WITH IDLER
2) N-16 UTILITY BOX WITH ALL METAL LID OR APPROVED EQUAL
3) WATER METER (PURCHASED THROUGH CITY)
4) CURB STOP
5) 4" DIA. RISER (NOTCHED OVER PIPE AT BASE)
6) 4" METER SPUD
7) 8 1/2" meter spud
8) SCH. 40 P.V.C. THROUGH PIPE EYE
9) 1/2" SCH. 40 PVC OR APPROVED EQUAL TO OTHER BOX (SEE DETAIL W-10)

TYPICAL CROSS-SECTION OF METER INSTALLATION

DERRICK WHITEHEAD
ENVIRONMENTAL UTILITIES DIRECTOR

CITY OF ROSEVILLE
TRADITION · PRIDE · PROGRESS

ENVIRONMENTAL UTILITIES DEPARTMENT

RESIDENTIAL 3/4" INCH SERVICE LINE

SCALE: NONE
REVISED: MARCH 30, 2001
DRAWN BY: R. VAN NESS
APPROVED BY: D. WHITEHEAD

CST
W-5