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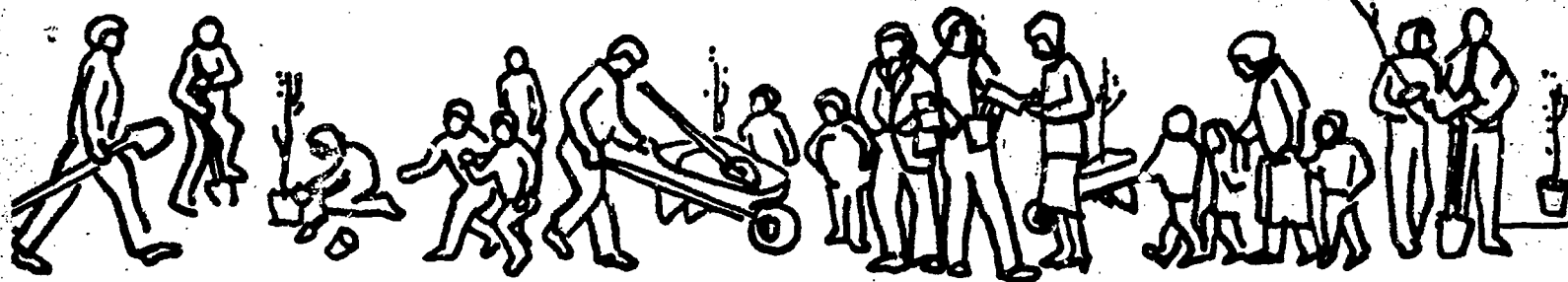
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ABSTRACT

This curriculum was written for youth organizations and secondary students in the County of Sacramento, California to develop their ability to: (1) recognize and evaluate how decisions are made about land use; (2) understand the roles of elected officials, property owners, citizens, and local governmental departments and agencies; (3) understand the ingredients of effective advocacy on a local issue affecting their community; (4) recognize the beneficial roles trees play in the urban environment; and (5) participate in a local decision to improve their immediate environment by the planting of trees. Activities are divided into three sections that cover the topics of: (1) becoming informed; (2) becoming organized; and (3) taking action. Each activity contains sections detailing objectives, methods (with references to provided worksheets), materials, background, and enrichment activities. Student progress is evaluated using a worksheet tracking sheet. The curriculum guide contains 24 references, a list of 34 resources, and a 66-word glossary. (LZ)

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**TREES
STUDENTS
LOCAL GOVERNMENT
A PARTNERSHIP FOR A BEAUTIFUL COMMUNITY**

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**A Secondary Education Curriculum
developed by the
SACRAMENTO TREE FOUNDATION**

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SACRAMENTO TREE FOUNDATION

The Sacramento Tree Foundation (STF) is a private non-profit organization, dedicated to the planting and preserving of trees in the City and County of Sacramento. It was incorporated by the State of California on Arbor Day, March 7, 1982. One of the Foundation's goals is to promote educational tree programs for students in the Sacramento area. For more information, call (916)924-TREE.



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TREES, STUDENTS, LOCAL GOVERNMENT - A PARTNERSHIP FOR A BEAUTIFUL COMMUNITY

INTRODUCTION

This curriculum is designed for secondary level students to develop their ability to:

- a) recognize and evaluate how decisions are made about land use.
- b) understand the roles of elected officials, property owners, citizens and local governmental departments and agencies.
- c) understand the ingredients of effective citizen advocacy on a local issue affecting their community.
- d) recognize the beneficial roles trees play in the urban environment.
- e) participate in a local decision to improve their immediate environment by the planting of trees.

This curriculum is written for youth organizations and secondary students in the County of Sacramento. It is developed to be used in conjunction with the Tree Planting Grant Program of the Sacramento Tree Foundation. The curriculum framework is also applicable to educational and environmental organizations statewide, such as the Tree People in Los Angeles, and Friends of the Urban Forest in San Francisco.

Each activity is outlined as follows:

OBJECTIVE:	Educational goal of the activity
METHOD:	Description of the activity
MATERIALS:	List of items needed
BACKGROUND:	Information for the teacher/leader to prepare for the activity; vocabulary to emphasize
ENRICHMENT:	Additional, related activities to supplement the main activity

MATERIALS LIST

By Activity

- ACTIVITY #1** **Worksheet #1: VALUE OF TREES**
- VCR, copy of video "Trees, Please!" (to borrow, contact the Sacramento Tree Foundation office).
- ACTIVITY #2** **Worksheet #2A: HOW DO TREES AFFECT URBAN LIFE?**
Worksheet #2B: URBAN TREES: Do Trees Make A Difference?
- A location to study trees (on school grounds, a park or library, along a tree lined street, local neighborhood), white cloth, thermometers, wildlife guidebook (Sacramento's Outdoor World).
- ACTIVITY #3** **Worksheet #3A: VALUE OF THE LAND - Neighborhood**
Worksheet #3B: VALUE OF THE LAND - School
- Street map of one area of the community at two periods of development. (Provided with curriculum.)
- Slides of Sunrise Mall area before and after development are available through STF.
- Other maps of the present and past community are available from a real estate office, the Chamber of Commerce, automobile clubs or from book stores.
- ACTIVITY #4** **Worksheet #4: TREE CHALLENGES AND PLAYERS**
- ACTIVITY #5** **Worksheet #5: DECISION MAKING**
- Decision making models.
City and County organizational charts and maps.
- ACTIVITY #6** **Worksheet #6A: SITE INVENTORY CHECK LIST**
Worksheet #6B: EVALUATING A TREE PLANTING SITE
- Local maps of the proposed planting areas or site maps of streets, schools or parks. (These maps may need to be made by students.)
- ACTIVITY #7** **Worksheet #7: SEEKING PERMISSION TO PLANT TREES**
- Sample letter "Tree Project, Maintenance and Evaluation".

- ACTIVITY #8** **Worksheet #8: EXPLORING URBAN TREE CAREERS**
- Several days of newspaper classified ads, telephone books, urban tree career literature (check with guidance counselors, school and county librarians for materials).
- ACTIVITY #9** **Worksheet #9: LOOKING FOR TREES**
- Telephone books, guides to public agencies and private organizations. (see Resources)
- ACTIVITY #10** **Worksheet #10: TREE PLANTING GRANT**
- Copy of the STF tree planting grants program including a cover letter, How to Write a Tree Grant Proposal, and Tree Management Agreement.
- ACTIVITY #11** **Worksheet #11: TREE PLANTING BOARD GAME**
- ACTIVITY #12** **Worksheet #12: VOLUNTEERS AND CIVIC RESPONSIBILITY**
- ACTIVITY #13** **Worksheet #13: REACHING THE MEDIA**
- Local newspapers, telephone books; model news releases, public service announcements, letter-to-the-editor (samples provided); telephones, typewriters, art supplies for poster making activities.
- ACTIVITY #14** **Worksheet #14: HOW TO PLANT A YOUNG TREE**
- Illustrations of proper tree planting techniques. (Refer to "Tree Care - A Brief Guide to Planting and Maintenance of Trees" supplied with this curriculum.)
- ACTIVITY #15** **Worksheet #15A: A TREE PLANTING MAINTENANCE PLAN**
Worksheet #15B: TREE PLANTING
- Trees, shovels, stakes, tree ties, water.
 Materials needed for the celebration, student certificates.

STUDENT TRACK SHEET

Students will check each item after completion of activity worksheet. (Students are to complete all worksheets before receiving completion certificate.)

___WORKSHEET #1	VALUE OF TREES
___WORKSHEET #2A	HOW DO TREES AFFECT URBAN LIFE?
___WORKSHEET #2B	URBAN TREES: Do Trees Make A Difference?
___WORKSHEET #3A	VALUE OF THE LAND - Neighborhood
___WORKSHEET #3B	VALUE OF THE LAND - School
___WORKSHEET #4	TREE CHALLENGES AND PLAYERS
___WORKSHEET #5	DECISION MAKING
___WORKSHEET #6A	SITE INVENTORY CHECK LIST
___WORKSHEET #6B	EVALUATING A TREE PLANTING SITE
___WORKSHEET #7	SEEKING PERMISSION TO PLANT TREES
___WORKSHEET #8	PROPOSAL WRITING FOR TREE PROJECT
___WORKSHEET #9	TREE PLANTING GRANT
___WORKSHEET #10	TREE PLANTING BOARD GAME
___WORKSHEET #11	VOLUNTEERS AND CIVIC RESPONSIBILITY
___WORKSHEET #12	EXPLORING URBAN TREE CAREERS
___WORKSHEET #13	HOW TO PLANT A YOUNG TREE
___WORKSHEET #14	REACHING THE MEDIA
___WORKSHEET #15A	TREE MAINTENANCE PLAN
___WORKSHEET #15B	TREE PLANTING

SECTION I BECOMING INFORMED

Informed citizens can make a difference. They realize the importance of preserving existing trees and planting new ones to soften the brick-and-stone harshness which can sometimes accompany new development. In short, they know that the quality of life at work, play and home flourishes in the natural environment.

Informed citizens must have specific knowledge and skills, so they can become effectively involved in planning their community's environmental future. They must:

- 1) Understand land use issues;
- 2) Be able to identify players involved; and
- 3) Know how to enter the decision-making process themselves.

This section explores these three key areas.

ACTIVITY #1: DO TREES MAKE A DIFFERENCE?

- OBJECTIVE:** Students will be able to identify the importance of trees in the urban forest and landscape.
- METHOD:** After viewing "Trees, Please!", a 20-minute video, the students, through class discussion, will develop a list of urban tree benefits and problems and complete worksheet #1, "Value of Trees".
- MATERIALS:** Worksheet #1: VALUE OF TREES
VCR, copy of video "Trees, Please!" (to borrow, contact the Sacramento Tree Foundation office).
- BACKGROUND:** In order to draw attention to the role of trees in an urban forest and landscape, discuss these concepts with your students. They will develop an understanding of tree benefits and tree problems (liabilities such as annoyances, trouble, discomfort and nuisances).

Vocabulary: aesthetics, buffer, canopy, enhance, evapotranspiration, filter, foliage, habitat, forest, landscape, particulate, percolate, pollutants, transform, urban

Concepts:

TREE BENEFITS

Environmental Quality

- * Produce oxygen and recycle carbon dioxide
- * Reduce pollution as branches and leaves collect dust and other particulate matter
- * Appear to reduce noise by providing a barrier effect
- * Reduce glare
- * Create wildlife habitat
- * Humidify air by evapotranspiration
- * May slow runoff by breaking the impact of rainfall and allowing water to percolate rather than flood over soil
- * Reduce erosion by holding soil

Energy

- * Cool buildings in summer by providing shade and moisture
- * Insulate buildings by providing windbreaks and shelter
- * Reduce wind by absorbing the energy of moving air

Economics

- * Raise property values
- * Provide fuel wood from trimmed or dead trees
- * Provide timber for construction uses
- * Provide job opportunities - arborist, gardener, landscape designer, tree maintenance worker, horticulturist, nursery staff, tree grower, teacher

Aesthetics

- * Give places an identity and character
- * Can transform neighborhoods through long term tree growth
- * Enhance building appearance
- * Create buffer zones from traffic, industry and outdoor activity
- * Reduce glare by absorbing reflected light
- * Form canopies over buildings or open space
- * Provide beauty through variety - shape, color, forms, seasonal changes

TREE PROBLEMS

Environmental Quality

- * Produce smoke and dust when wood is burned
- * Block views
- * Litter / obstructions from fallen branches.

Energy

- * Limit solar access by blocking sun
- * Damage to utility systems from branches and roots

Health

- * Allergies for humans and animals from seasonal pollen

Economics

- * Longterm maintenance costs
- * Property damage from roots breaking sidewalks, patios, foundations or when trees or branches fall
- * Can clog drains from leaf and root accumulation
- * Large expense of tree removal

Aesthetics

- * Landscape littered by fallen leaves and fruit
- * Inappropriate tree size and shape for location
- * Insect pests make messes

- ENRICHMENT:** List the many ways trees affect your life.
- Find examples of trees in expressions of art, music and literature.
- Interview persons whose careers are associated with trees.
Report your findings to the class.
- Collect commercial ad designs which include trees. Make your own tree logo.
- Try Project Learning Tree (secondary level guide)
- #2, 'Tree Verse' - Students express attitudes and feelings about trees in poetry.
- #5, 'A Cassette Tour of Neighborhood Trees' -
Students demonstrate their understanding of the value of trees by identifying their roles to younger children.

WORKSHEET #1 VALUE OF TREES

Objective: Students will be able to identify the value of trees in the urban landscape by completing the following tree activities.

1. Rank (from 1-10) the following list in the order of how you value trees.

I value trees for:

- _____ summertime cooling as I sit in the shade of their canopy
- _____ wintertime heating from pruned limbs and branches of dead trees
- _____ fruits and nuts that I enjoy eating
- _____ long-term change as trees grow and transform the neighborhood
- _____ living greenery to give a place identity and beauty
- _____ climbing in, sitting under and enjoying its aesthetic beauty
- _____ the money I make when I rake leaves
- _____ improved health as branches and foliage filter out particulates which are pollution
- _____ the wildlife habitat created within the urban forest
- _____ the way trees enhance the landscape along my street

2. How do others value trees? Compare your list with the class. Do others feel the same way as you do? Prioritize how the class feels.

I value trees for:

- _____ summertime cooling as I sit in the shade of their canopy
- _____ wintertime heating from pruned limbs and branches of dead trees
- _____ fruits and nuts that I enjoy eating
- _____ long-term change as trees grow and transform the neighborhood
- _____ living greenery to give a place identity and beauty
- _____ climbing in, sitting under and enjoying its aesthetic beauty
- _____ the money I make when I rake
- _____ improve health as branches and foliage filter out particulates which are pollution
- _____ the wildlife habitat created within the urban forest
- _____ the way trees enhance the landscape along my street

3. On the back of this page, define the terms underlined on this worksheet.

ACTIVITY #2: TREE WORTH

OBJECTIVE: Students will be able to analyze and evaluate how much trees affect the quality of urban life.

METHOD: This is a 2-part activity. Give students worksheet #2A as preparation for the main activity #2B "Urban Trees: Do trees make a difference?" Review how trees affect urban life (Activity #1)

For activity #2B, select a study area where trees are in or part of an undisturbed natural setting. If possible, identify the types of trees and point out differences. Age is an indicator of landscape stability and the progress of growth. This activity can be done by individual students or small groups.

Use worksheet #2B to guide the activity.

MATERIALS: Worksheet #2A: HOW DO TREES AFFECT URBAN LIFE?
Worksheet #2B: URBAN TREES: Do Trees Make A Difference?

A location to view trees (on school grounds, a park or library, along a tree lined street, local neighborhood); white cloth; thermometers; wildlife guidebook (Sacramento's Outdoor World).

BACKGROUND: Refer to the background information provided in Activity #1 for concepts of the value and importance of trees in the urban environment. Clarify use of the following two important terms to avoid future confusion.

Vocabulary: affect, effect

ENRICHMENT: Try Project Learning Tree activities:
#7 'Natures Air Conditioners' - Students calculate the amount of moisture evaporated by plants through the process of transpiration.
#8 'Green Mufflers'. - Students describe the noise-abating qualities of roadside vegetation.

WORKSHEET #2A HOW DO TREES AFFECT URBAN LIFE?

Objective: Students will be able to compare and analyze the pros and cons of how trees affect urban life.
 a) From the "starter" ideas, make additional comparisons in the other categories in brainstorming groups.
 b) Generate a master list from each group's ideas.

CATEGORY	POSITIVE	NEGATIVE
People	pleasant to view	leaves to rake in the fall
Vegetation	provide shade	too much shade
Products	fruit, nuts, firewood	rotten fruit, wood smoke
Lifestyles school work recreation	warm fireplaces	have to chop the wood
Environment sound watershed microclimate	evaporation=cooler	humidity
Land use	increases land values	design of building more difficult
Animals	food, habitat	noisy, roosting birds

WORKSHEET #2B URBAN TREES - Do Trees Make a Difference

Directions: Use this form to analyze the trees in the site you have selected to observe. Give a score to each area listed in the form. Add up the total score. If your study area scores near 75 points, the trees are a great asset to the community.

Location: _____ Month: _____

AESTHETICS

- ___ 1. Do the trees enhance the appearance of the area? If no rate from 0-5; if yes, rate 6-10 points.
- ___ 2. Do the trees provide beauty to the area by their shapes, colors and forms? If no, 0-5; if yes, 6-10 points.

ENVIRONMENTAL QUALITY

- ___ 3. Do the trees have dust on their leaves? Check the leaves by wiping a damp white cloth over the surface. If there is a lot of dust score from 6-10; if little 0-5 points.
- ___ 4. Do the trees provide a pleasant smell or odor to the area? If not, score 0-5; if yes, 6-10 points.
- ___ 5. Do the trees show signs of disease. Look for dead limbs and yellow leaves. Score from 0-5 if there are signs of disease caused by pollution; 6-10 no.

TEMPERATURE CONTROL

- ___ 6. Measure the air temperature under the trees and in an open area. Record the difference in the temperature readings and enter that number as the score.

WIND CONTROL

- ___ 7. Are there many groups of trees in the area (either natural or planted) that form a windbreak? If so, rate the score from 1-10 considering how much protection is given by the windbreak. If there is no group of trees forming a windbreak, enter 0 as the score.

SAFETY AIDS

- ___ 8. Do the trees in the study area help control light and sound? Give a score for each of these;
- The trees help control light glare (Score from 1-10)
 - The trees help control unpleasant and distracting views from the road (score from 1-10 points)

WILDLIFE HABITAT

- ___ 9. Give 2 points for each of these animals found roosting or feeding in the study area and 5 points for each animal nesting.

___ scrub jay ___ magpie ___ quail ___ squirrel
___ woodpecker ___ flicker ___ robin ___ raccoon

_____ TOTAL

ACTIVITY #3 LAND VALUE AND CHANGE

OBJECTIVE: Students will be able to distinguish between land use changes that are planned and unplanned and describe land use changes which have occurred in a specific locality.

METHOD: The class will study maps of land use changes which may be tree related. Divide the class into three groups. Ask each group to study their community's land use in one of three periods: 1) present, 2) 5 years ago, 3) 10 years ago. Each group will study and make an enlarged version of their map for one of the three time periods. Each map shall be the same scale. After completion, students will compare the changes and discuss the following questions (note: a transparency of each map would be useful in handling a group discussion):

1. What influenced land use changes? Location?
2. Did the changes appear to be planned or unplanned? How can you tell?
3. Who influenced the changes? Developer, policymaker, laissez-faire?
4. What guidelines would one select to plan for future changes?
5. How do trees influence changes: 10 years ago, 5 years ago, present?
6. What value do trees give to the land?
7. What other factors determine the value of land?

As a follow up activity ask students to make a scale drawing of their neighborhood street or school property. The drawing should include existing trees. Use worksheet #3B to complete the activity.

MATERIALS: Worksheet #3A: VALUE OF THE LAND - Neighborhood
Worksheet #3B: VALUE OF THE LAND - School

Street map of one area of the community at two periods of development. (Provided with curriculum)

Slides of Sunrise Mall area before and after development are available through the Sacramento Tree Foundation.

Other maps of the present and past community are available from a real estate office, a Chamber of Commerce, automobile clubs or from book stores.

Ask students to locate maps or make them available.

BACKGROUND: What do you do with a blank sheet of paper? That depends on whether you are a writer, an artist, a printer or a paper salesman. The best use depends on your point of view.

The same logic holds for land use planning. A developer may evaluate a lot in terms of access, the number of buildings it can accommodate and location. Neighbors may value the lot for the open space and greenery it provides. Policy-makers may view the lot as a potential means for alleviating a shortage of low-income housing. Environmentalists may cherish the lot because it is home to a "Heritage Oak", a tree which is over 100 years old and cannot be replaced in our lifetime.

Clearly these viewpoints are in conflict, and that conflict in Sacramento and other urban centers is likely to grow more acute as population growth increases the pressure for more housing, more shopping centers, more schools, etc. Yet land use conflicts must be resolved in an orderly, rational way which considers all points of view.

Vocabulary: community, developer, laissez-faire, land use, natural resource, neighborhood, planner, policy maker, zoning

ENRICHMENT: Invite a teacher or principal who has been in the community for some time to come to the classroom and discuss what the community was like in the past.

Interview residents who have lived in the community for more than 25 years. Ask these persons how their community has changed.

Determine whether long time residents believe changes are for the better or not. Do changes appear to be planned or unplanned? What role did these residents have in planning for change?

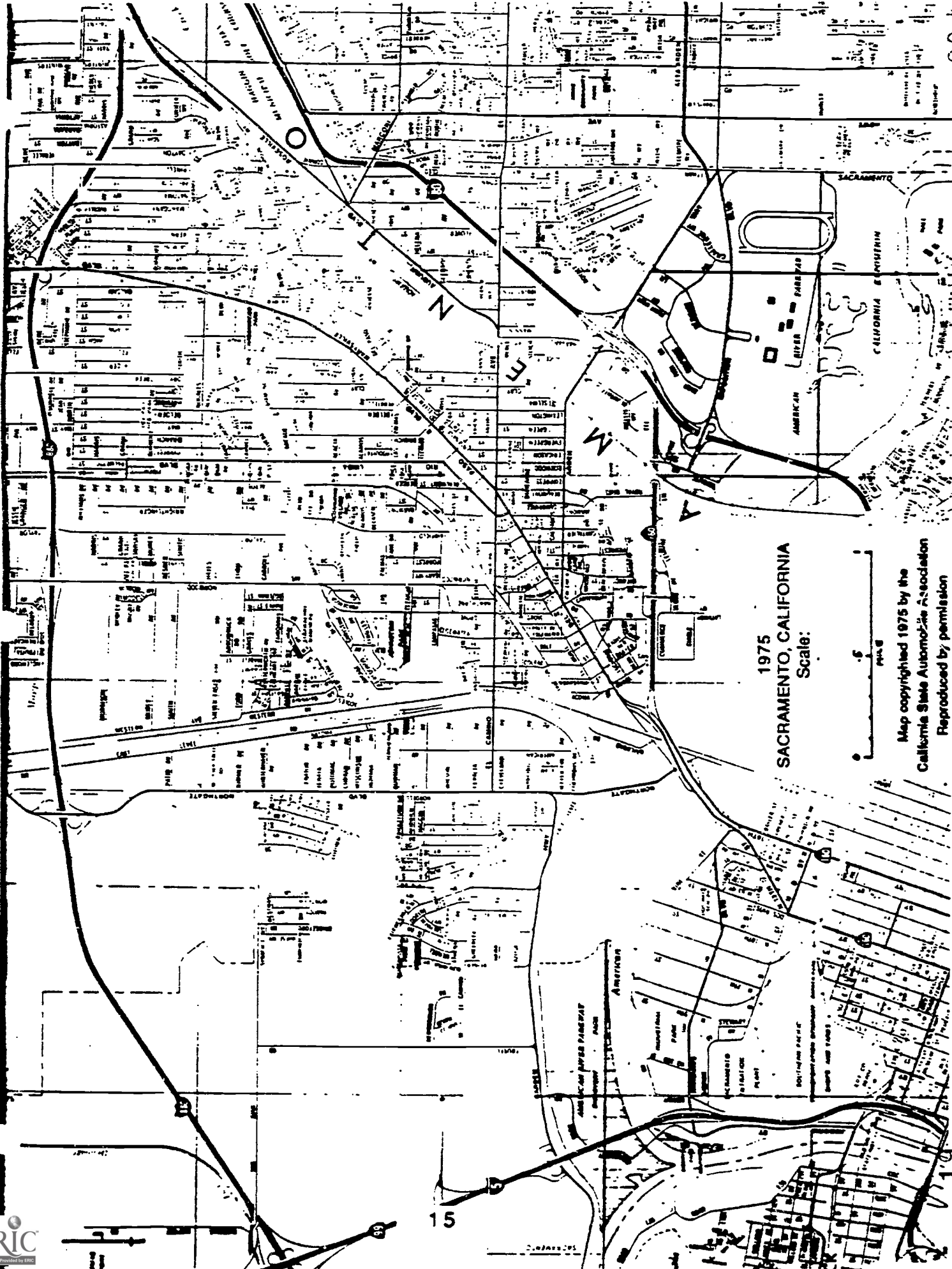
Have students collect data from community records, including photos and old maps.

Have students clip articles about land use changes from local newspapers. Discuss the articles in class and be sure to ask the questions listed under "method".

Have students identify what natural features and what man made structures in the community are important to the way they live.

Try Project Learning Tree Activity:

#14: 'Community Land Use' - Students study the change which has occurred in a specific locality as a result of people's activities.

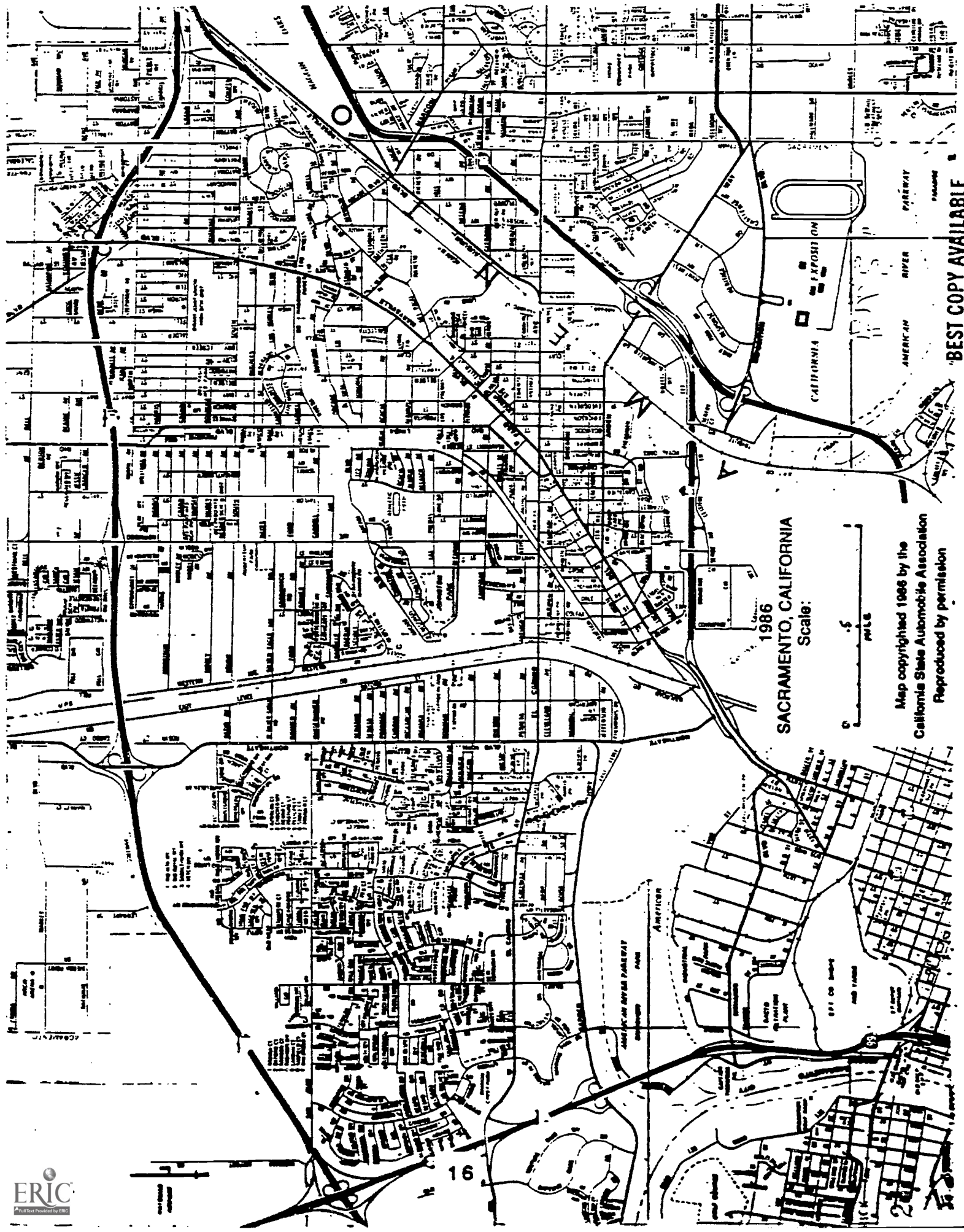


1975
 SACRAMENTO, CALIFORNIA
 Scale:



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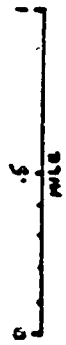
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SACRAMENTO, CALIFORNIA

1986

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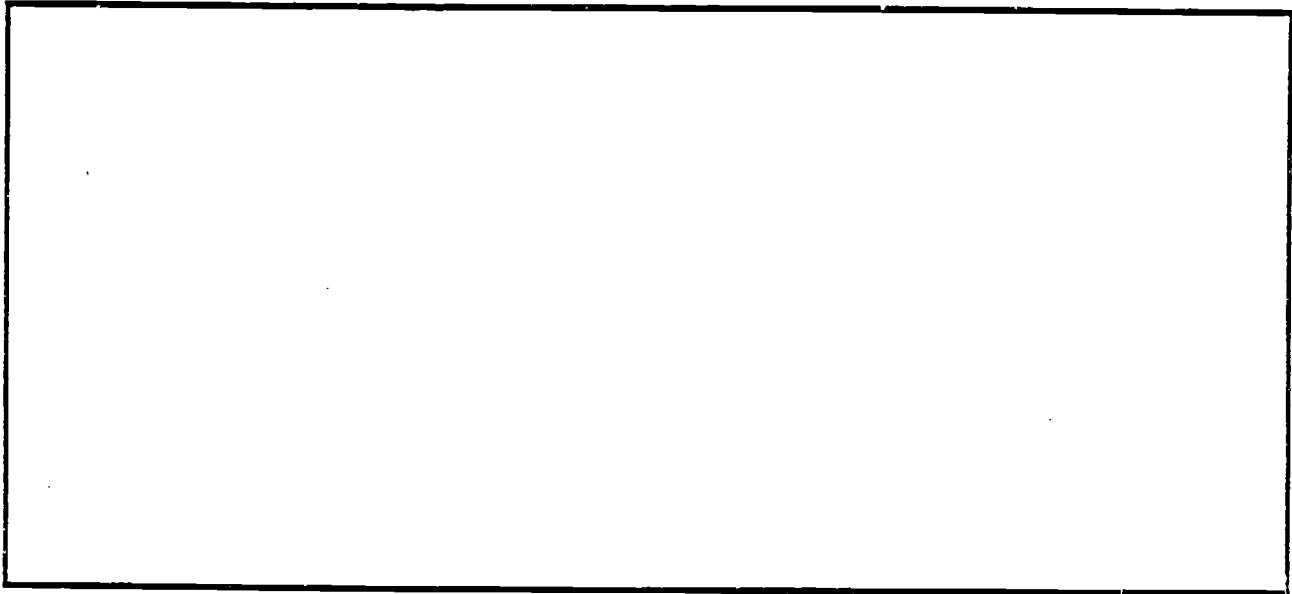


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


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WORKSHEET #3A VALUE OF THE LAND - Neighborhood

OBJECTIVE: Students will be able to list land uses which occur in their neighborhood. Students will note planned and unplanned, and helpful and adverse land changes. Students will draw their neighborhood in the space below, including land use symbols.



LEGEND For Community Map

-  Major Street
-  Minor Street
-  Freeway
-  Railroad
-  Airport
-  School
-  Fire Station
-  Police
-  Government Offices
-  Museum

-  Church
-  Park
-  Commercial Use
-  Industrial Use
-  Residential Use
-  Single Family
-  Multi-Family
-  River
-  Lake

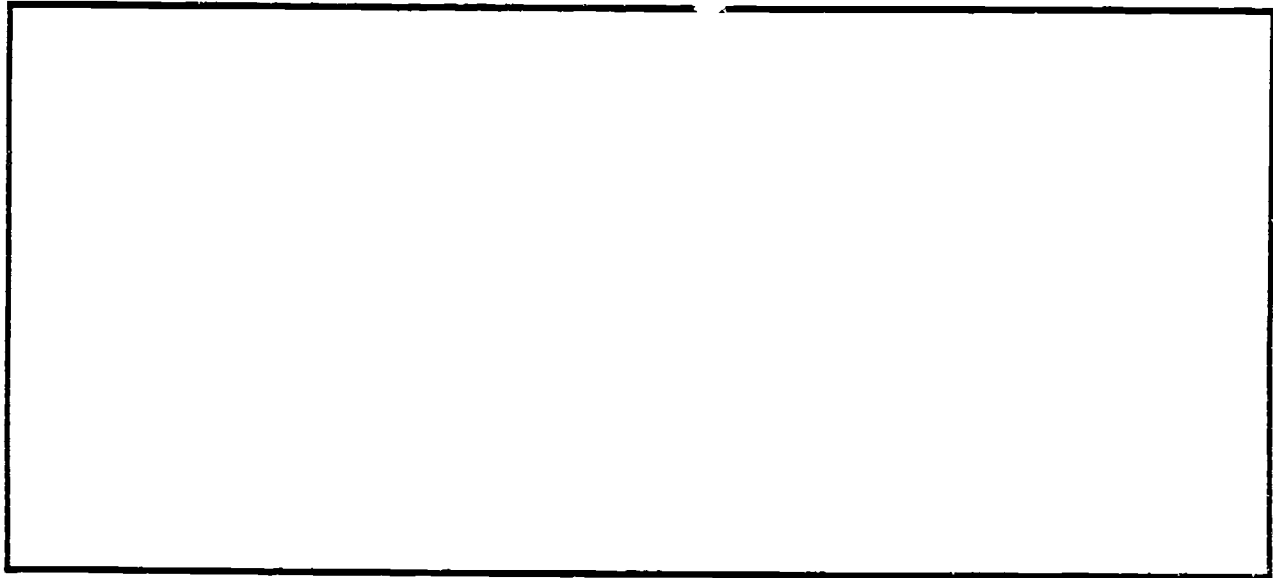
Scale
1 inch = 100 feet
1 city block = 360 ft.

WORKSHEET #3A (continued)

1. Has the community changed since you moved here? If so, how?
2. Have the land use patterns changed?
3. What uses have remained/disappeared?
4. What uses are increasing/decreasing?
5. How have uses such as schools, housing, industry, transportation, and open space changed?
6. Describe how trees have changed or affected the land use in your vicinity.
7. What changes are planned/unplanned?
8. What changes are beneficial/harmful?

WORKSHEET #3B VALUE OF THE LAND - School

OBJECTIVE: Students will draw a scale drawing of their schoolyard in the space below. The drawing will include the existing trees.



Make your own land use symbols. Determine the scale for your drawing. Be creative and colorful.

QUESTIONS:

1. Why do you think the trees were planted where they are?
2. Are the trees doing well where they are planted?
3. What is the value of the area that included trees?
4. What is the area used for that does not include trees?
5. What is the impact of people and machines on trees?

ACTIVITY #4 LAND USE CHALLENGES AND PLAYERS

OBJECTIVE: Students will be able to identify land use problems and solutions from different viewpoints and to evaluate solutions.

METHOD: Ask your class to brainstorm about land use situations in which trees are an issue. The students should also identify the key players in these situations (refer to the background section for suggested scenario).

Ask the students to play the roles of 1) community council members who must make a decision on the land use situation, 2) the applicant (builder, developer or owner) who is appearing before the council and 3) community members testifying about the project (neighbors, community leader, special interest group, environmentalist, business person, real estate agent, sign salesperson, others).

Have the students analyze the perspective of each of these groups or individuals. Discuss whether the viewpoints are compatible or incompatible. Have the students develop solutions to any conflicts.

Students as a group should be able to answer these questions:

1. What assumptions or criteria are you using to determine incompatibility in point of view?
2. What must each group be willing to acknowledge in order to reach a solution?
3. Do you believe the conflicts will become more or less frequent in the future? Why?
4. How does compromising help the interest groups involved, the individual, the community and the nation?
5. How does this method of problem-solving relate to our form of government?

MATERIALS: Worksheet #4: TREE CHALLENGES AND PLAYERS

BACKGROUND: BRAINSTORMING RULES:

- a) List all ideas.
- b) Do not discuss ideas at this time (you lose ideas).
- c) There are no right or wrong opinions.
- d) Do not make judgments about each other's ideas.
- e) Repeating an idea is OK. If you slow down, to check for duplication, you may lose your train of thought or a good idea.
- f) Enjoy silences - the best is yet to come. In many cases the best ideas come toward the end.

EXAMPLE SCENARIO FOR ROLE PLAYING

* You are one of 5 members of the community planning advisory council which makes recommendations to policy makers on land use. An applicant wishes to have a used car business on an undeveloped lot on a main thoroughfare in your community. The community plan states the street is to have shade trees.

* There is a large Heritage Oak in the middle of the car dealer's lot. The community plan states that trees are for shade and beauty. Trees reduce glare for drivers and provide relief from the asphalt, cement and chrome environment of the street.

* The neighbors to the rear are opposed to a car lot and upset about the potential view of and noise from the cars. At the present time they have a view of the tree from their windows.

* The applicant does not want trees along the street because the trees could hide the advertising signs and the office where salespeople watch for customers. Trees could create a mess on the cars and cost money to plant and to maintain. He wants to remove the large Heritage Oak tree in the middle of the lot to enlarge the sales office and parking area.

* A possible solution:

- a) Design planters wide enough to accommodate the street trees and the falling leaves.
- b) Plant trees which develop high canopies. They won't obstruct the view to or from the sales area.
- c) Erect a monument type sign near the street. Trees with high canopies will not obstruct it.

- d) Protect the Heritage Oak by;
 - not paving near it.
 - protecting its dripline during construction. There should not be asphalt around the tree.
 - forgoing irrigation, plant drought tolerant groundcover at its base around its base.
- e) Protect the environment of the neighbors by erecting a sound wall and plant screen trees.

Vocabulary: assumptions, brainstorming, criteria

ENRICHMENT:

Student groups that have worked out solutions to the hypothetical conflicts may submit their recommendations to groups, (e.g. community area planning councils) which are experiencing similar conflicts "for real". Ask the community organization(s) to read and comment on the students' proposals.

Try Project Learning Tree Activity:

37 "We Can Work It Out" - Students identify compatible kinds of land use and describe their criteria for judging compatibility.

ACTIVITY #5 DECISION MAKING

OBJECTIVE: Students will be able to understand how local government functions to resolve land use conflicts and how land use decisions are made.

METHOD: Using the maps from Activity #3, have students locate where they live, and in which supervisorial or city council district. Using the organization chart and the flow charts provided for city and county government, have the students identify how land use decisions are made in Sacramento.

Have students consult the decision making models and identify the model used by their local government for land use decisions. Also discuss other models for making land use decisions.

Ask the students the following questions:

1. Which of the decision making models would be best at the neighborhood level? Consider the land use problem of locating a new park in a partially built neighborhood.
2. What are the benefits of using a logical, step-by-step process in decision making?
3. Which model is most useful for an individual decision? Which for small group decisions, large groups, and/or informal decision making?

Using the elements on the chart provided:

1. Ask students to take the role of an applicant trying to get a project approved. Let them draw a flow chart describing the process to come.
2. Next, ask them to draw up an action plan to follow if there is opposition to the project.
3. Finally, students should prepare an outline of how they could ensure that their concerns were addressed. They should identify where in the flow chart they have access to the process and could testify on behalf of their concerns.

MATERIALS: Worksheet #5: DECISION MAKING
Decision making models
City and county organizational charts and maps

BACKGROUND: Set up a hypothetical situation in which a group of community-minded citizens wish to plant trees along a busy, barren street which crosses a city/county boundary. Study the flow chart on the following page which indicates the local government decision making process for the City and County of Sacramento.

Vocabulary: concessions, decisions, flow-chart, models, testify

ENRICHMENT: 1. Separate the students into three groups representing the city, county and state. Have each group investigate who the official governmental decision-making entities are for land use decisions. Investigate by asking parents, visiting the library, reading the newspaper, and calling city and county administrative or planning offices or state resource agencies.

2. As a class, choose one or two of these decision-making groups. Then split up the responsibilities below, and find out:
- The number of people in the group and their names.
 - Who the chairperson is.
 - How community members can give testimony to that group (where, when and how).
 - How records of their meetings are kept (written minutes, audio or video-tapes) and the importance of such records.
 - Who the constituents are that each decision-maker represents.

Have students write out their findings and report them to the class. Then compile the findings and publish a report for the class. This can be duplicated for each student.

3. What type of decision making process does your school government use?

4. Invite a speaker from the League of Women Voters to talk to the class about land use issues.

5. Try Project Learning Tree Activities:

#32 'Participating Democracy' - Students describe how they can input into resource management policies and decisions.

#33 'Who Knows This Place?' - Students describe means by which a law might be changed as a result of a change in environmental practice.

#34 'Urban Open Space' - Students describe zoning regulations which cover local, natural and open-space areas.

#35 'Where To Plant?' - Students describe how their local government functions and how to demonstrate how citizen input can affect government decisions.

#84 'Plan Your Community's Future' - Students learn land use planning goals, classification and criteria in developing comprehensive community land use proposals.

RESOURCES: . Sacramento Government League of Women Voters of
Sacramento, 1984. 2206 K Street, Sacramento, CA 95816.
Phone - 443-3678

DECISION MAKING MODELS

When decisions are made about complex problems, it is useful to have a model or standard method of proceeding. Review the decision-making models below. Notice that the steps in each model are similar, but there are important differences: the amount of citizen involvement encouraged, who makes the decision, and how it is made. Find and circle these differences.

	GENERAL MODEL	CONSENSUS MODEL	LEGISLATIVE MODEL	AUTHORITY MODEL
Step 1	Awareness of the problem	Group becomes aware of the problem	Lawmakers become aware of the problem	Authority becomes aware of problem
Step 2	Clarification & statement of problem	Group clarifies & agrees on the problem statement	Group clarifies & states the problem	Authority clarifies & states problem
Step 3	Researching the problem	Group researches the problem	Research done on problem	Research done as time allows
Step 4	Citizen involvement encouraged & many solutions proposed	Involvement & alternative solutions from group members are encouraged	Much involvement & alternative solutions from citizens & government agencies are encouraged	Though little public involvement is sought, several solutions are considered
Step 5	Discussion of alternatives and consequences	Discussion of alternatives and consequences to discover & resolve conflicting values & opinions	Public testimony taken about & discussion of alternatives and consequences	Information gathered on alternative solutions and consequences
Step 6	Comparison of alternatives and consequences	Group compares the alternatives and consequences	Decision-makers compare the alternatives and consequences	Authority compares the alternative solutions and consequences
Step 7	Can a decision be made or is more discussion needed? If no if yes	Has agreement on major points of solution been reached? if no if yes	Is decision-making group ready to vote? if no if yes	Does the authority have enough information to decide? if no if yes
Step 8	DECISION	There is CONSENSUS of opinion and a decision	There is a law or policy by MAJORITY VOTE	There is an AUTHORITY DECISION
Step 9	Action to implement the decision	Action to implement the group decision	Action to implement law or policy	Action to implement the decision
Step 10	Evaluation of decision	Evaluation of decision	Evaluation of policy or law	Evaluation of decision

WORKSHEET #5 **DECISION MAKING**

OBJECTIVE: Students will select one land use example and work through the decision making model that leads to approval or denial of a land use project. Use the worksheet to outline an action plan for either supporting or opposing the project.

1. CAR LOT VERSUS CITY BEAUTIFICATION COMMITTEE (CBC):

An owner of a car lot does not want to plant trees near the brand new cars. The "CBC" thinks it would improve the surroundings.

2. HOME DEVELOPER VERSUS COUNTY SAVE THE TREES COMMITTEE:

A home developer wants to build a 16-home development in an area with valued oak trees.

3. HOME OWNER VERSUS CITY TREE INSPECTOR:

A home owner does not want the city to remove a tree that has been in the street right-of-way as long she/he can remember.

DECISION MAKING MODEL

Choose one land use problem:

1) Define the problem

2) Evaluate both sides of the problem.

PRO

CON

WORKSHEET #5 (continued)

- 3) Choose either to favor (pro) or oppose (con) the land use issue described. Outline your reasons for selecting the side you have chosen.

- 4) Develop an action plan and create a "flow chart" to describe the steps you will take to make your case heard by a decision-making group.

- 5) Summary questions -
 - a) Which type of decision-making model would help resolve this problem?

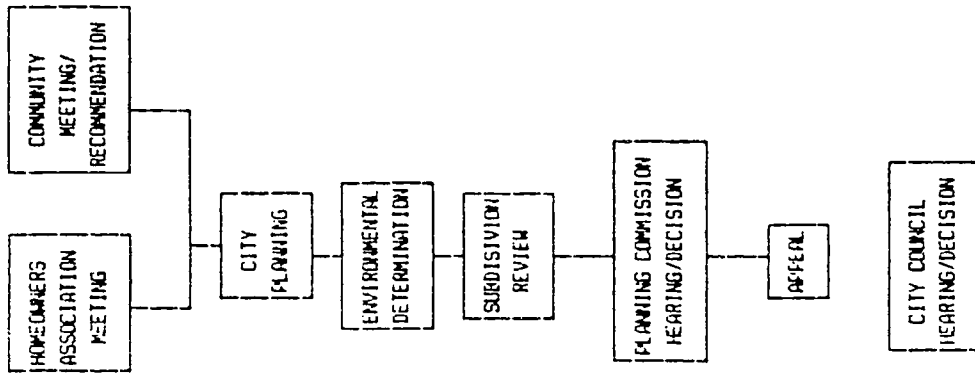
 - b) What governmental agencies and advisory groups will you need to meet with?

 - c) At what point can citizens testify in behalf of their opinion?

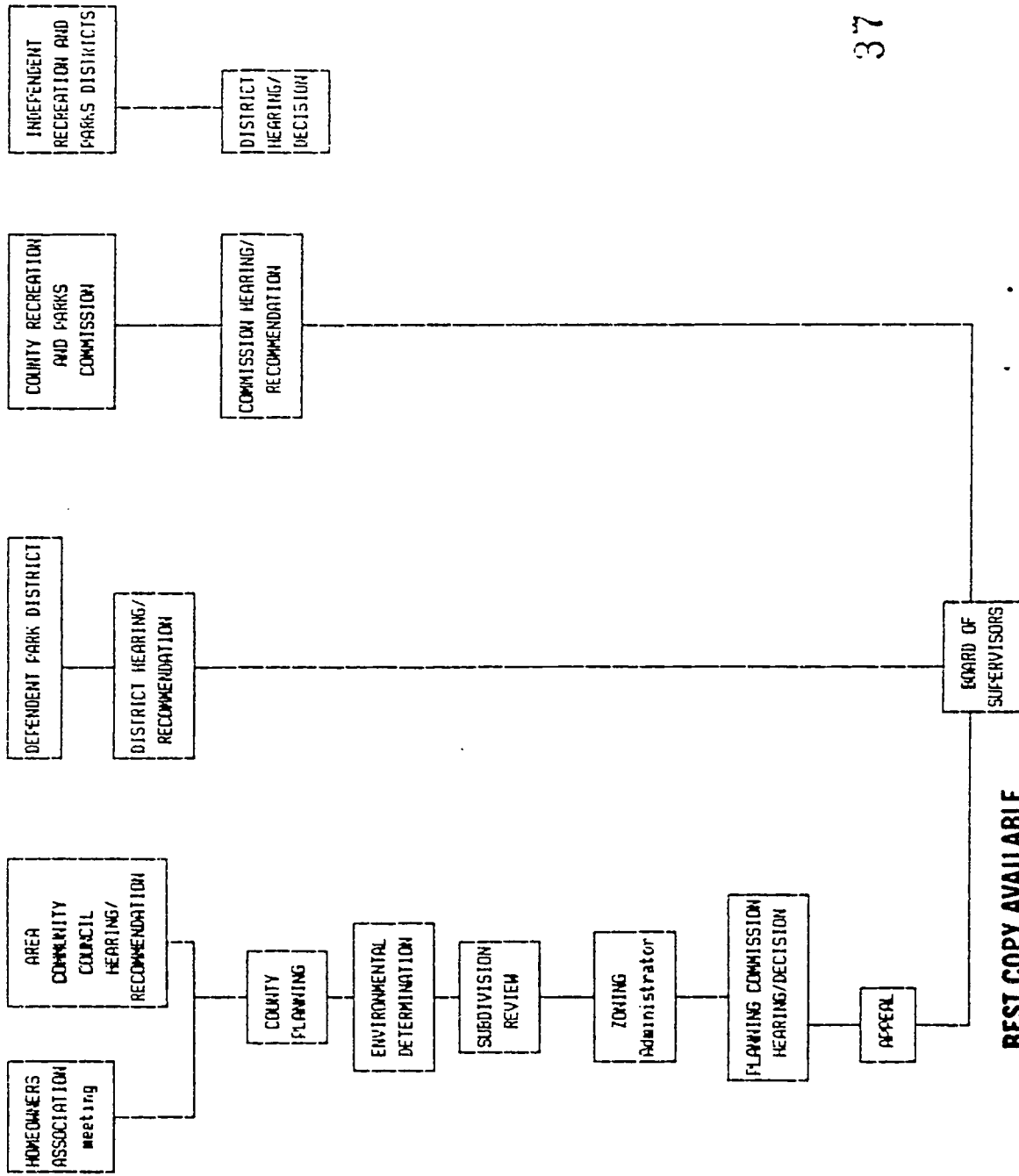
 - d) If you were not satisfied with the decision made, can you appeal? How would you do this?

THE PLANNING PROCESS AND PUBLIC INPUT

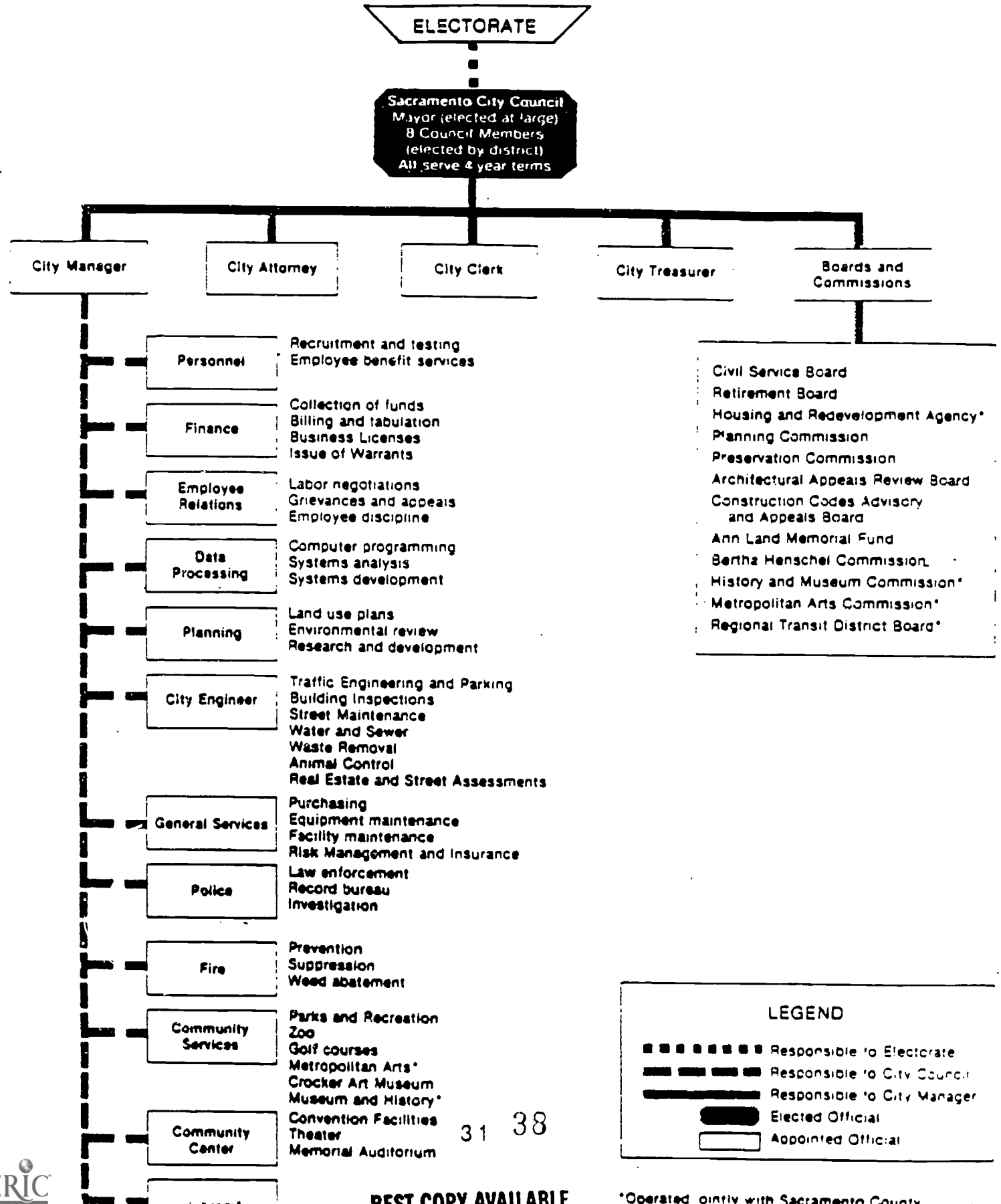
CITY OF SACRAMENTO

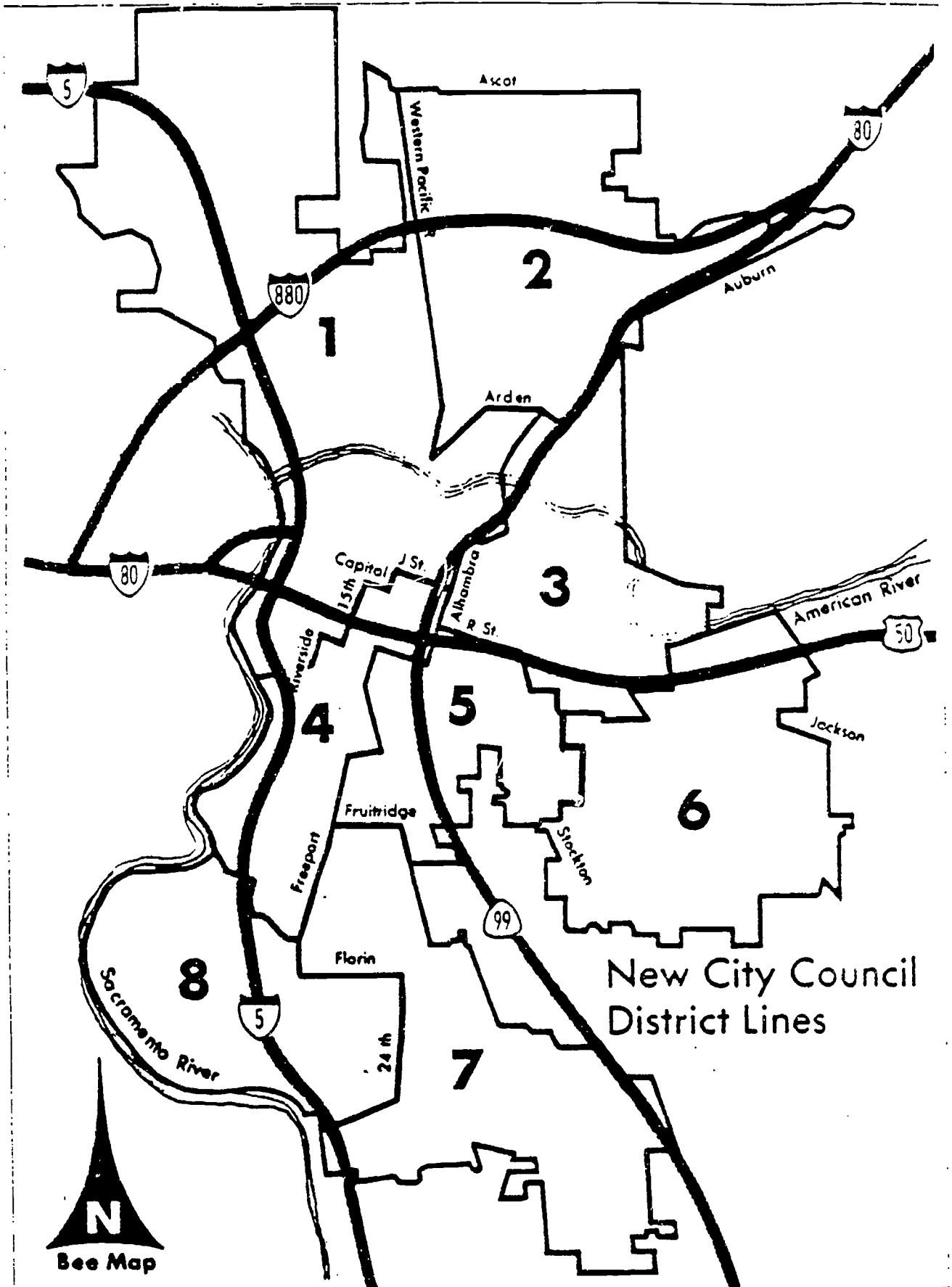


COUNTY OF SACRAMENTO

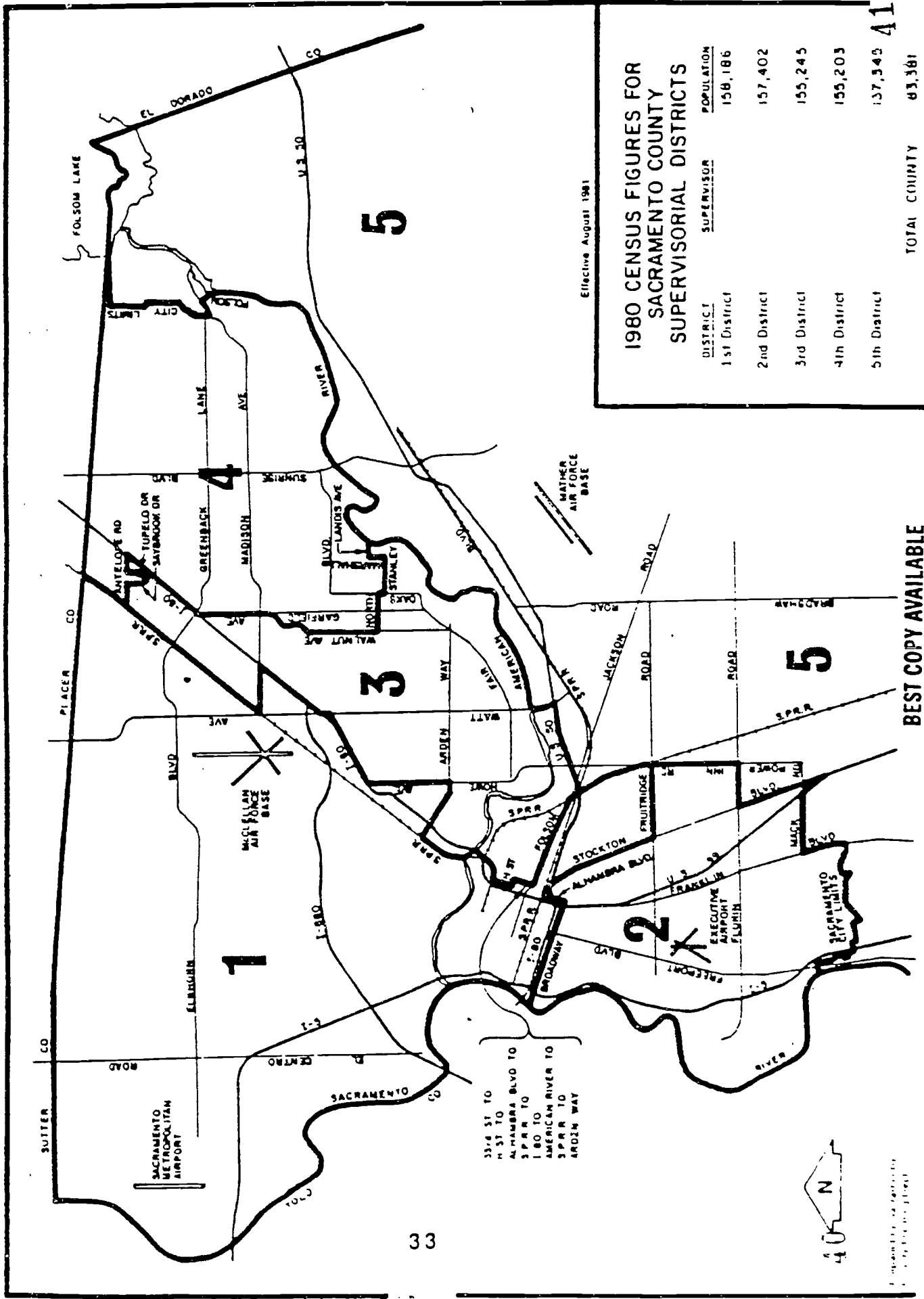


CITY OF SACRAMENTO ORGANIZATION CHART





New City Council District Lines



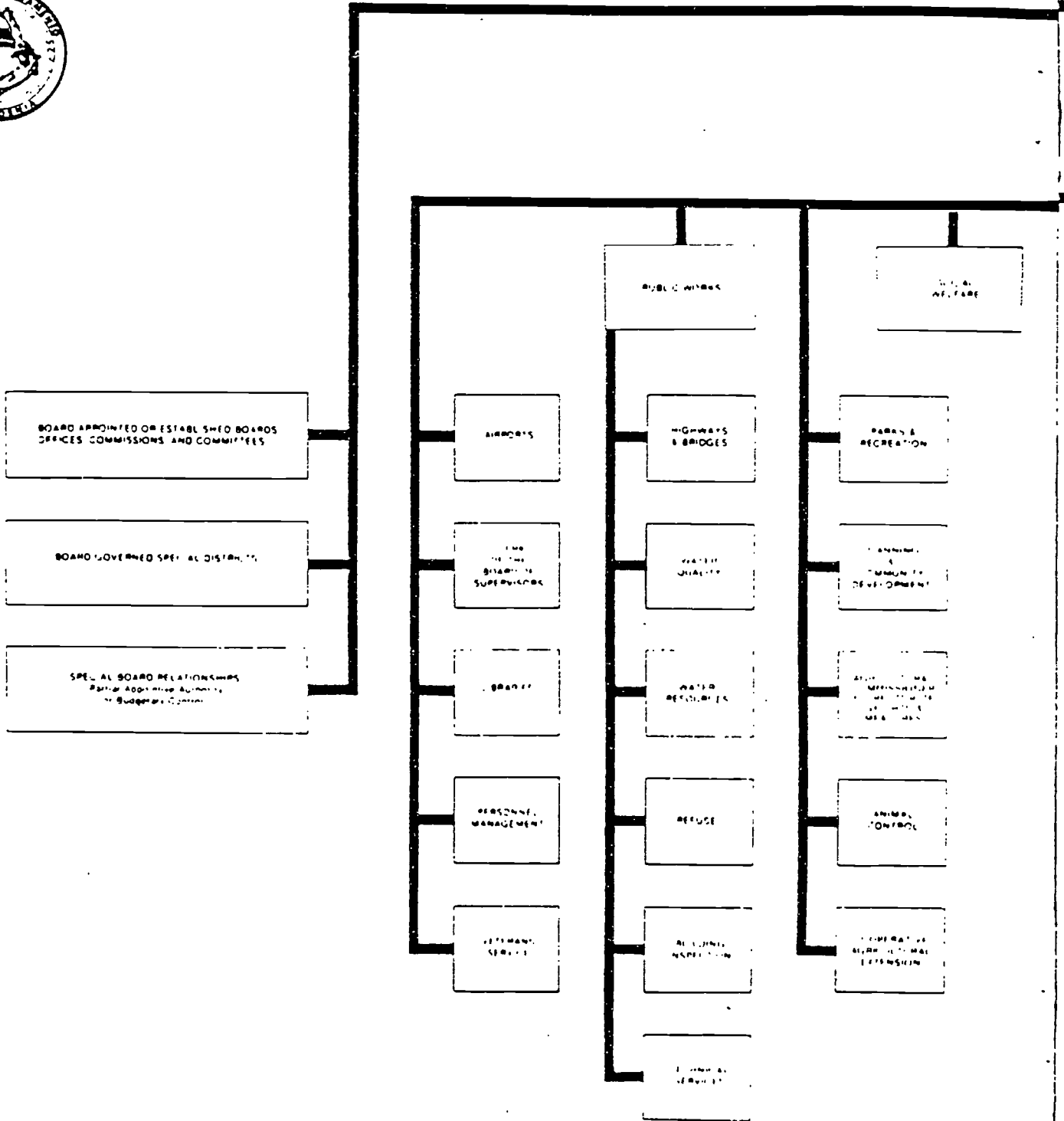
Effective August 1981

1980 CENSUS FIGURES FOR
SACRAMENTO COUNTY
SUPERVISORIAL DISTRICTS

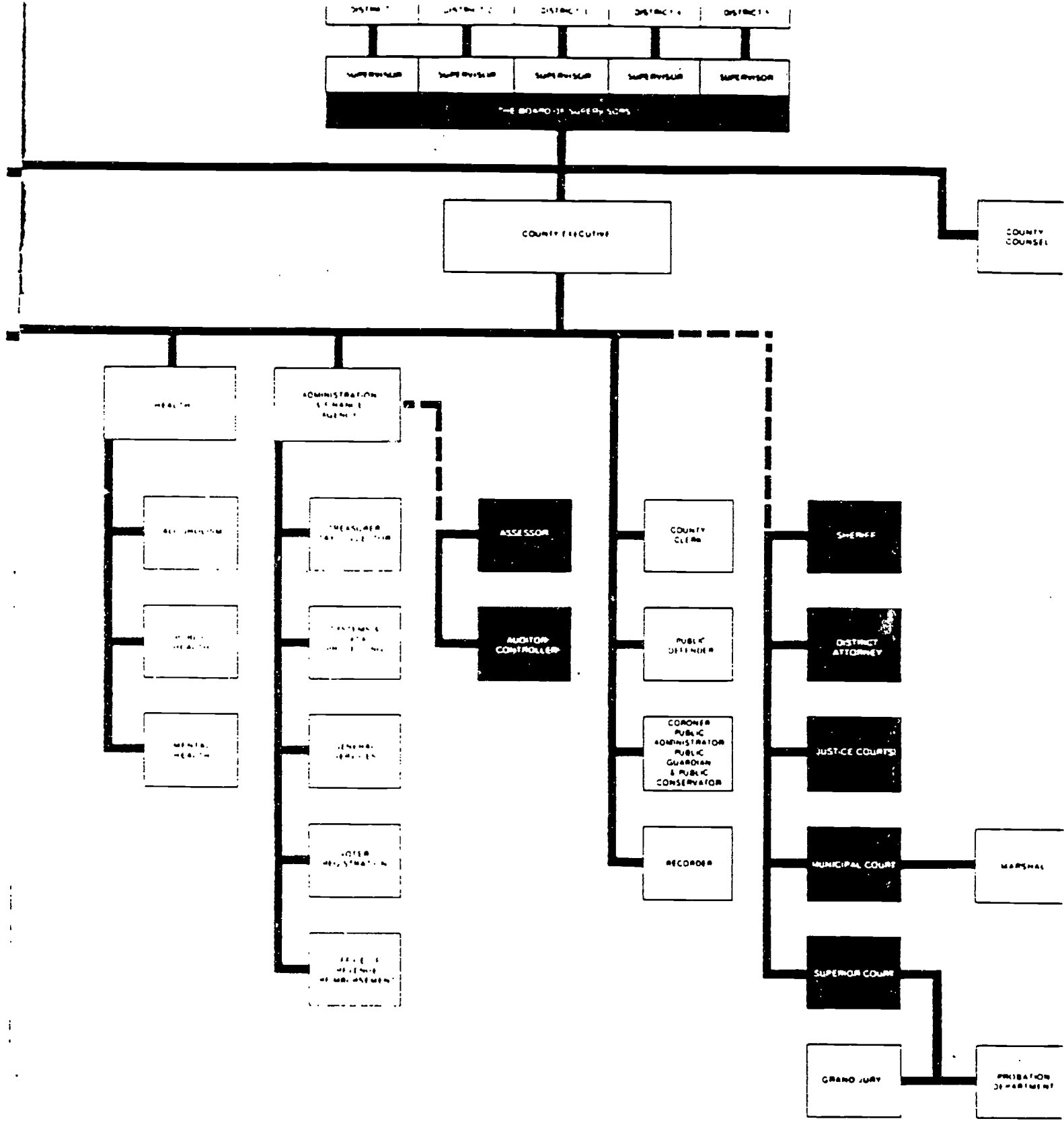
DISTRICT	SUPERVISOR	POPULATION
1st District		158,186
2nd District		157,402
3rd District		155,245
4th District		155,203
5th District		137,345
TOTAL COUNTY		633,381

BEST COPY AVAILABLE

THE COUNTY OF SACRAMENTO • CALIFORNIA
 700 H STREET
 SACRAMENTO 95814



LEGEND
 ———— INDICATES LINE OF DIRECT AUTHORITY THROUGH APPOINTMENT OR ELECTION
 - - - - - INDICATES COORDINATIVE RELATIONSHIP
 ■■■■■ INDICATES ELECTED OFFICIALS



THE ORGANIZATION CHART
 PUBLISHED BY THE COUNTY EXECUTIVE
 LAYOUT BY THE PLANNING DEPARTMENT
 1981



SECTION II BECOMING ORGANIZED

This section will help students get ready for an actual tree planting project. It will show students how to select the site, acquire necessary permits, establish maintenance agreements and prepare a proposal for obtaining trees from the Sacramento Tree Foundation.

ACTIVITY #6 PLACES FOR NEW TREES

- OBJECTIVE:** Students will learn how to identify sites for planting new trees.
- METHOD:** Students will evaluate several alternative planting sites along a street or park or school. They will debate the pros and cons for each site and vote to select a site.
- MATERIALS:** Worksheet #6A: SITE INVENTORY CHECK LIST
Worksheet #6B: EVALUATING A TREE PLANTING SITE
Local maps of the proposed planting areas or site maps of streets, schools or parks. (These maps may need to be made by students).
- BACKGROUND:** First, choose a site. Consider soil types, availability of water, the surrounding land use and long term plans for the property.
- Be sure to identify the property owners or local agencies which have jurisdiction over properties. Find out what type of landscape maintenance plan the owner can provide.
- Check the site for landscape design considerations. Planting the right tree in the right place will add both beauty and value to the property in years to come, and will avoid future maintenance problems (i.e. buckled sidewalks or trees growing into aboveground or underground utility lines).
- Aesthetics should be considered. Choosing trees for their color (spring flowers and fall foliage), texture, size, form, bark and branching characteristics is important to good landscape design.
- Draw maps and take pictures. Then you and the class can make or refine planting decisions later. Refer to the site inventory check list, and Activity #6A for other details to consider when making a survey of potential tree planting locations.
- Vocabulary: inventory, proposal
- ENRICHMENT:** Try Project Learning Tree:
34. 'Urban Open Space' - Students describe zoning regulations which cover local, natural and open space areas.
- REFERENCES:** Trees for Sacramento Streets, Sacramento Tree Foundation, 1987

WORKSHEET #6A SITE INVENTORY CHECK LIST

OBJECTIVE: Students will locate places within their neighborhood where planting trees would benefit their community. Use this SITE INVENTORY CHECK LIST to evaluate the site and to identify reasons for planting trees at this location.

Site Location: _____

Directions: Check any of the items listed here which describe the site.

1. Purpose for proposed tree planting.
- Aesthetic value
 - Shade/energy conservation
 - Insulation/energy conservation
 - Food production
 - Erosion control
 - Clean air
 - Glare reduction
 - Play apparatus
 - Wood production
 - Screen view
 - Provide sense of scale/proportion
 - Memorial planting
 - Attract wildlife
 - Increase property value
 - Overall beautification
 - Personal statement
 - Improve the city/county
 - Other

2. Location is near:
- Sidewalk
 - Parkway
 - Adjacent to fence
 - Open area
 - Median strip
 - Aboveground utility lines
 - Underground utility lines

3. Surrounding vegetation is:
- Natural vegetation
 - Non-watered ground cover
 - Irrigated lawn
 - Shrubs
 - Other planted trees
 - Other

4. Site topography is:
- Hilltop
 - Hillside
 - Broad valley bottom
 - Close to creek
 - Flatland

5. Soil type is:
- Sandy
 - Loam
 - Clay
 - Moist
 - Dry

6. Exposure is:
- Subject to frost
 - Rarely freezes
 - Very windy
 - Sheltered from wind
 - North facing slope or aspect
 - South facing slope or aspect

7. Sun is:
- Morning
 - Afternoon
 - All day
 - Shade
 - Reflected off street, wall, water

WORKSHEET 6A (continued)

8. Water is:

- Unavailable
- Available on site
- Irrigation or sprinkler on site
- Available off site
- Access limited

9. Maintenance concerns are:

- _____ Feet to grow vertically
- _____ Feet to grow horizontally
- _____ Feet to closest service line (sewer, electric, water, cable TV, phone)
- _____ Feet to pavement
- Neighbors nearby to monitor trees
- Vandalism likely
- Many burrowing rodents
- Landscape maintenance provided
- No landscape maintenance provided

10. Other considerations:

ACTIVITY #7 PERMISSION FOR PLANTING TREES

OBJECTIVE: Students will identify property owners and request permission and appropriate permits to plant trees.

METHOD: Students will make personal contact with the property owner to present the idea of a tree planting project and will:

1. seek permission to plant trees,
2. request an agreement to provide maintenance and care for the trees that are planted.

MATERIALS: Worksheet #7: SEEKING PERMISSION TO PLANT TREES
Sample letter "Tree Project, Maintenance and Evaluation"

BACKGROUND: Personal interviews with property owners provide an excellent opportunity for students to explain their tree planting project. Students should take along their site maps showing the trees to be planted.

A telephone call may be all it takes to determine the name of the property owner. But if there is no telephone, the owner may be reached by using information from the county assessor's office. Property parcel numbers, owner name, mailing address, and site address are all public information. The property owner may have a different mailing address than the planting site.

After informally contacting the owner, send a letter asking written permission for the project and an agreement to provide adequate maintenance and care for the trees. This step formalizes the project and establishes accountability. Refer to the sample letter addressed to the Tree Foundation. (see Activity #10)

Vocabulary: accountability, assessor's parcel number, county assessor, lobby, public information, site agreement

ENRICHMENT: Students will make an appointment with the property owner to hand deliver their request and agreement form and return the signed form to the class.

WORKSHEET #7 SEEKING PERMISSION TO PLANT TREES

OBJECTIVE: After obtaining the name and address of the property owner where the tree planting project is to take place, write a letter to the owner requesting the following information:

1. Permission to plant trees.
2. An agreement with the owner that the trees will be watered and cared for after the planting takes place.

TREE PLANTING PERMISSION LETTER

ACTIVITY #8 URBAN TREE MANAGERS

- OBJECTIVE:** Students will explore job opportunities related to caring for trees. This will help them understand who manages the urban forest.
- METHOD:** After a class discussion highlighting the different organizations, agencies and individuals involved with planting and maintaining urban trees in the local community, students will carry out the following activities:
1. Check the classified ads in the local newspapers, (especially the Saturday/Sunday editions) for tree related jobs. Use the "urban tree career checklist" to note jobs available.
 2. Have students research job descriptions for these positions. They should note training, experience needed or requirements for special certificates. Use library reference materials or make telephone calls to individuals listed in the telephone book.
- MATERIALS:** Worksheet #8: EXPLORING URBAN TREE CAREERS
Collect several days of newspaper classified ads; telephone books; and urban tree career literature (check with guidance counselors, school and county librarians for materials).
- BACKGROUND:** In Sacramento County, tree planting and maintenance is carried out by various agencies and organizations.

City Park and Street Trees

The Tree Services Division of the Department of Community Services and Parks is responsible for trees within the City of Sacramento. Within that department, a tree supervisor, an arborist and several tree maintenance workers and tree trimmers take care of the city's trees. The City also grows trees at its nursery. Tree Services personnel plant, maintain and remove trees in parks and along streets.

County Streets and Parks

The Department of Public Works is responsible for trees planted along county streets. Tree trimming crews prune trees and remove dead trees along frontage roads, as well as provide water to trees along county roads and in street median strips. The crews and their foremen are responsible for carrying out these jobs under direction of a supervisor. Due to budget constraints, the County does not treat trees for insect damage. They do manage and protect trees such as native oaks and landmark trees through the implementation of special ordinances such as the "Tree Preservation Ordinance" (Sacramento County Code No. 480). This program is also managed by the Department of Public Works under the direction of the tree coordinator who reviews new project plans when they have trees.

In addition to the street tree program, the Department of Parks and Recreation is responsible for trees in regional parks. There are also special park districts which employ tree maintenance workers to care for the trees in neighborhood parks.

Sacramento Municipal Utility District (SMUD) and Pacific Gas and Electric (PG&E).

Utility companies maintain trees that grow near their power lines. Tree limbs must be pruned to avoid interference with utility lines. They employ crews of tree trimmers and maintenance workers to carry out these jobs. SMUD also maintains trees at their facilities and publishes public information on appropriate trees to plant under utility lines.

Private Tree Workers, Arborists, Landscape Horticulturists.

Professional tree workers and arborists prune, spray and provide other types of care for trees. Experienced arborists, especially those who have university degrees or have become certified by the International Society of Arboriculture (see resources), are trained to care for trees and woody shrubs in a landscaped setting. They diagnose tree problems and recommend control measures. They often consult with plant disease specialists or pathologists who work for the State Department of Agriculture or the University of California. Arborists also work with developers to recommend trees to provide shade, screening and beauty.

Landscape Architects and Designers

These professionals usually have university training and specialized licenses. Landscape architects and landscape designers can make detailed landscape plans which consider growth characteristics, irrigation requirements and maintenance needs of plants selected.

Tree Growers and Nursery People

Growing and caring for young trees also takes specialized knowledge. Trained and experienced tree propagators can keep supplies of new trees available to sell through nurseries and other sources.

Colleges and Vocational Schools

Locally, American River College, Cosumnes River College and the University of California, Davis and Berkeley, have programs that provide training in horticulture.

University of California Cooperative Extension

The Cooperative Extension provides publications dealing with research related to specific themes such as tree propagation and care. Agricultural and horticultural advisors are professionally trained and can provide answers and advice about trees. Master Gardeners, volunteers trained by the Cooperative Extension, conduct clinics and research answers to specific problems.

Botanists

This group includes both professionals and amateurs who have studied many aspects of plant science and can answer questions about identification and biological requirements of trees.

Sacramento Tree Foundation

The "Technical Advisory Committee" of the Sacramento Tree Foundation can supply expert advice about recommended trees to plant and how to plant and maintain them. The committee is made up of volunteers, many who are tree professionals and experts. The committee also evaluates the Tree Foundation's tree grant requests and provides assistance to groups who receive trees from the Foundation.

Vocabulary: amateur, certified professional. Also note the underlined words above

ENRICHMENT:

Invite "tree professionals" to meet with the class to discuss their specific jobs and the training and experience needed to do the job. Acquaint students with "Teletip", pre-recorded messages, made available by the University of California Cooperative Extension (one copy has been provided with the curriculum).

Have students check out college catalogs to find out what universities and colleges offer special programs to prepare tree specialists.

Have students find out how the Sacramento County "Tree Preservation Ordinance" is enforced.

Try Project Learning Tree Activity:
#83 'Careers in Forestry' - Students describe forest-related careers.

WORKSHEET #8 EXPLORING URBAN TREE CAREERS

OBJECTIVE: Students will explore job opportunities related to caring for urban trees by doing the following:

1. Survey the classified ads of a local daily newspaper to find out what types of urban tree related jobs are available. Use the "Urban Tree Career Checklist" below, to note those jobs listed:

- | | |
|---|--|
| <input type="checkbox"/> Arborist | <input type="checkbox"/> Botanist |
| <input type="checkbox"/> Forest Manager | <input type="checkbox"/> Horticultural teacher |
| <input type="checkbox"/> Irrigation specialist | <input type="checkbox"/> Landscape architect or designer |
| <input type="checkbox"/> Landscape maintenance worker | <input type="checkbox"/> Land use planner |
| <input type="checkbox"/> Nursery person | <input type="checkbox"/> Parks maintenance worker |
| <input type="checkbox"/> Pest control operator | <input type="checkbox"/> Plant pathologist |
| <input type="checkbox"/> Tree planter | <input type="checkbox"/> Tree propagator |
| <input type="checkbox"/> Tree trimmer | |

2. Clip job listings and staple to the back of this worksheet.
3. Choose one or more of these jobs and using resources available to you, find out what training and experience is needed to apply for the job. Summarize your findings here.

ACTIVITY #9 **LOOKING FOR TREES**

OBJECTIVE: Students will investigate potential tree donors and select from them, one or more to contact for donations of trees for their project.

METHOD: Students will identify organizations that may be willing to help them purchase trees for their tree planting project. Students will write letters to potential donors stating their purpose and goals in sponsoring a tree planting and request guidelines for writing a donation request. The class will review which donors will most likely fund their proposal.

MATERIALS: Worksheet #9: LOOKING FOR TREES
Telephone books, guides to public agencies and private organizations. (see Resources)

BACKGROUND: In most communities, there are several public, private (non-profit) community organizations and businesses that can help students obtain trees. Some public agencies are the city and county public works and parks departments, state and federal forestry agencies and the California Conservation Corps. Private organizations such as garden clubs, the California Native Plant Society and the Audubon Society may be able to provide trees or help with locating trees. Community groups, Chambers of Commerce, Rotary, Lions, Kiwanis, Soroptimist, PTAs and home owner associations may be willing to fund proposals or portions of projects. Local businesses such as home and garden stores, nurseries and landscape maintenance companies may provide funds, tools or assistance to the project.

Ask tree groups for specific guidelines which describe the help they can offer. Matching funds may be required. Often "in kind" services, such as tree care or tree management, can be given a monetary value and itemized as matching funds. If matching funds are an important criterion for receiving a donation, the class could consider holding a fundraiser. Car washes, paper drives, and bake sales are quick ways to make money.

To assure donors that trees will not be neglected, students should present a maintenance plan.

After listing potential tree donors, phone or write to narrow the list. Refer to the organizations listed as resources in the appendix.

Vocabulary: eligibility, in-kind, matching funds, proposal

ENRICHMENT: Invite a member of a service club, civic organization or agency employee (such as the California Conservation Corps) to attend class to discuss donation policies.

WORKSHEET #9 LOOKING FOR TREES

OBJECTIVE: After surveying possible agencies and organizations which provide funding or assistance for community projects, students will write a proposal for support for the tree planting project. They will request information about guidelines used by the organization in selecting proposals for support.

DRAFT TREE PLANTING PROPOSAL

ACTIVITY #10 TREE PLANTING GRANT

- OBJECTIVE:** Students will submit a proposal to the Sacramento Tree Foundation (STF) or a similar organization or agency to obtain a 'Tree Planting Grant'.
- METHOD:** Students will read the STF tree planting grant guidelines and write a draft and final proposal to request a donation of trees for their tree planting project.
- MATERIALS:** Worksheet #10: TREE PLANTING GRANT
Copy of the STF tree planting grants program including a cover letter, How to Write a Tree Grant Proposal, and Tree Management Agreement
- BACKGROUND:** Refer to the APPENDIX for a brief history of the STF. There are similar non-profit organizations in California such as Friends of the Urban Forest in San Francisco and Tree People in Los Angeles (See RESOURCES section in the appendix for their addresses). These private organizations are dedicated to tree planting in urban areas and offer donations of trees, expert advice, volunteer help, tree planting tools and educational materials to interested groups.
- Vocabulary: grant, non-profit organization
- ENRICHMENT:** Ask a speaker from the STF to attend this class session to make a presentation about the organization.
- Make a display of newsletters, posters and other materials provided by the STF or other tree planting organization.

WORKSHEET #10 TREE PLANTING GRANT

- OBJECTIVE: Students will write a 2 to 3 page letter describing their tree planting project, including the following:
1. Project title
 2. Project description
 3. Tree care program
 4. Project budget
 5. Tree project documentation
-

SAMPLE PROPOSAL FORMAT

Your address
Your city, state ZIP
Date

Name of Organization
Their address,
City, State ZIP

Dear _____,

Include:

Project Title

- summary project description
- group and contact person in charge of the planting (include names, addresses, phone numbers)

Project Description

- identify tree planting area for trees (include map)
- number of trees to be planted
- list who will do the planting
- proposed date for planting
- proposed management plan

Tree Care Program

- who will maintain the trees after they are planted

Project Budget

- dollar amount requested to purchase trees
- list of donated materials or "in kind" services

Tree Project Documentation

- signed owners agreement form
- "before" photograph of tree planting area

Sincerely,

Your Name

SACRAMENTO

Tree FOUNDATION



Board of Directors

Austin Carroll
PRESIDENT

Charles Sumner II
VICE PRESIDENT

Jan Thurston
SECRETARY

Greg Rodgers
TREASURER

Vi Austin

Ann Barkley

Richard Benvenuti

John Harvey Carter

Roger Dickinson

George Dobbins

Jeff Gustafson

Jane Hagedorn

Archie Hefner

John Kehoe

Peggy Kraus Kennedy

David Knepprath

Sooky Lee

Evelyn Luttrell

Mark Mohler

Linda Orlich

Madelon Randall

Ted Robinson

Jeanne Scallon

Charla Silverman

David Takasugi

Ray Takata

Steven Templeton

Nicholas Tomich

Jean Runyon Tow

Angelo Tsakopoulos

Thomas Whitney

Brian Wiese

Ruthann Ziegler
PRESIDENT

The Mayor

The Chairperson
of the County Board
of Supervisors

Ann Kohl

Dear

Thank you for inquiring about our tree planting program. We hope that you will seriously consider submitting a Tree Grant Proposal.

Trees benefit the Sacramento Community in many ways; they help produce fresh air; reduce air pollution; soften noises and glare; draw customers to retail centers; increase property values 5% to 15%; provide beautiful shade; and shelter urban wildlife.

As a non-profit organization, the Sacramento Tree Foundation is dedicated to planting trees and promoting the importance of trees in our urban environment. We co-sponsor tree plantings in parks, schools and along streets by volunteer groups and organizations.

For each approved Tree Grant the Tree Foundation provides: trees and fertilizer; tree ties and stakes; consultation on tree selection; tree planting instruction and assistance; and tree care information.

We ask co-sponsors requesting a project to: identify tree sites; secure property owner's permission to plant the trees; secure commitments to care for trees; find and organize volunteer tree planters; submit a written Tree Grant Proposal and provide "before and after" photographs.

The actual tree planting is only half of the commitment. Of equal importance to the Tree Foundation and co-sponsor is tree care and maintenance. The co-sponsor must provide: a tree project manager; scheduled inspection of trees and written status reports.

The attached enclosures provide you with detailed information, and proper forms for your Tree Grant Proposal.

Please, join us in continuing Sacramento's tradition as a "Community of Trees". For additional information call the Tree Foundation at 924-8733.

Sincerely,

Ray Tretheway
Program Coordinator

Attached: Enclosure 1 Tree Grant Criteria/How To Write a Tree Grant Proposal
Enclosure 2 Tree Project Maintenance and Liability Agreement
Enclosure 3 Tree Manager Agreement

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Sacramento Tree Foundation

Tree Planting Grants

The Sacramento Tree Foundation is seeking tree planting proposals for _____ Grants. The grants program is established to promote the planting of trees throughout Sacramento metropolitan area by community, neighborhood and service organizations.

Proposals must be received at the Foundation by _____.

Tree Grant Information

1. A neighborhood group or association, youth or senior organization, garden club, service or business group may submit a proposal for a tree planting project.
 2. The tree planting project may take place at school or park sites, along business or residential streets and at other public places.
 3. The Tree Foundation will provide organizational, technical and financial assistance.
- The Program Committee and Technical Advisory Committee of the Tree Foundation will have final decision in the selection of trees.

Criteria for Evaluation of Tree Grant Proposals

1. The Tree Foundation will sponsor tree planting projects when the following conditions exist:
 - evidence that the project provides a community benefit
 - evidence of a long term commitment from the support group
 - recruitment of community volunteers to plant the trees
 - guaranteed care of the trees (minimum of three years)
 - project meets criteria of the local government agencies
 - representative attends the tree management workshop on _____.
2. The Tree Foundation seeks program equity and geographical diversity in its tree planting projects.

How to Write Your Tree Grant Proposal

Submit a 2 to 3 page typewritten proposal including the following:

Project Title

- Summary Project Description (purpose and reasons for planting trees)
- Community Group and Contact Person (include names, phone numbers and addresses)

Community Group

- Description of lead community group (include group interests, number of members / students, other community projects)
- Other community groups participating in this project

Project Description

- Identify tree planting area and need / use of trees
- Number of trees to be planted (Tree Foundation will provide tree selection assistance)
- Planting date
- Number of volunteer tree planters (name of volunteer coordinator, with phone number)
- Schedule of activities for Tree Planting Day

Tree Care Program

- Identify tree maintenance group(s) (personnel, department, service, etc.)
- Signed Tree Manager Agreement
- Additional tree care, inspection or maintenance activities

Project Budget

- Anticipated sources of funding and donated materials
- Other available community resources

Tree Project Documentation

- Signed Tree Project Maintenance and Liability Agreement
- Map (or sketch) of tree planting area
- "Before" photographs of tree planting area.

Submit Tree Grant Proposals to:
Sacramento Tree Foundation

201 Lathrop Way, Suite F
Sacramento, CA 95815

For further information or assistance please call the Tree Foundation at 924-8733.

Sacramento Tree Foundation
P.O. Box 15824-A
Sacramento, CA 95852

Tree Project Maintenance and Liability Agreement

1. Permission is hereby granted to enter upon our property at _____ between the hours of _____ and _____ for the following purpose:

To plant a tree(s) on our property for the
_____ tree project.

2. This permission shall continue in effect until the proposed tree planting on our property is completed; provided, however, this permission shall expire on _____ 198__.
3. In consideration of your giving us a tree(s), we agree to water, fertilize and care for the trees, planted in accordance with your instructions.
4. In consideration of your giving us a tree(s), we agree to hold you harmless from all liability associated with the tree or tree planting.

Signature

Print Name

Street Address

City, State and Zip Code

Date

Sacramento Tree Foundation
P.O. Box 15824-A
Sacramento, CA 95852

Tree Manager Agreement

In consideration of the Tree Foundation providing the trees for the

Tree Project, the following person(s) have agreed to assist in the management of the trees for a minimum period of three years and provide the Sacramento Tree Foundation with biannual reports.

Tree Manager

Name _____

Signature _____

Address _____

Phone: Work _____ Home _____

Alternate Manager

Name _____

Signature _____

Address _____

Phone: Work _____ Home _____

The Tree Foundation will assist the Tree Manager by providing tree care and maintenance information, technical assistance, and care and inspection reminders. The Tree Foundation staff and committee members will also monitor the trees to assess care and maintenance practices.

Signature

Date

Print Name

Phone

Address

City and State and Zip Code

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SECTION III TAKING ACTION

Community involvement generates pride. Students who take part in making community changes will enrich their education, their sense of self and their future.

So far students have learned to evaluate the importance of trees in urban settings, how land use decisions are made by local or school government, how to make changes using local government channels and how to develop a project which will enhance their community. In the next activities, students will carry out their tree planting project. They will learn first-hand, how active individuals can change their community.

The importance of volunteerism is one of the concepts featured in this section of the curriculum. Volunteers provide an important function to decision making leaders in the community. Students can participate as volunteers by completing this project with their classmates.

The next activities will prepare the students to take action by sponsoring a tree planting event. They will learn how to attract the media, how to plant and maintain a tree.

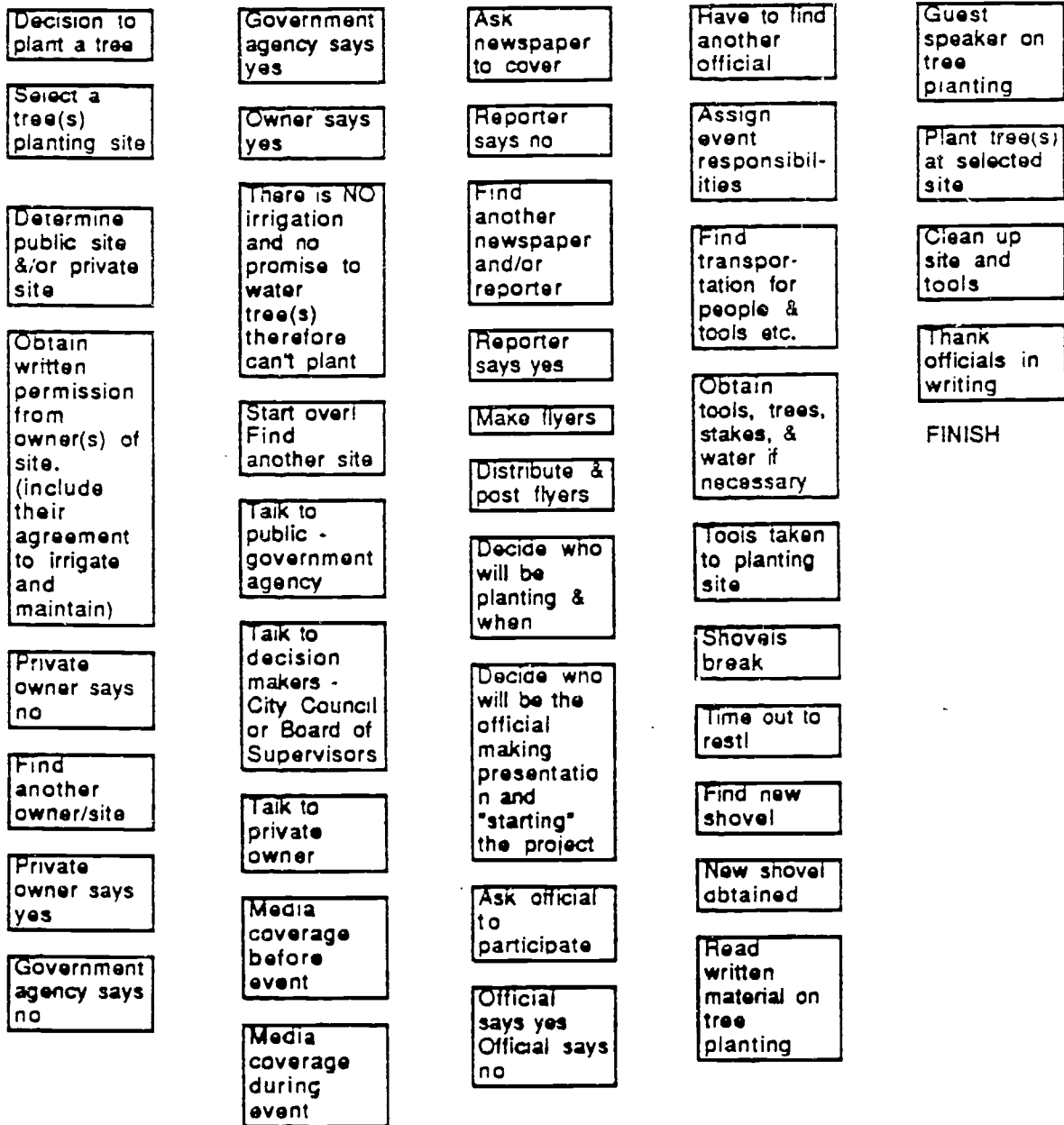
ACTIVITY #11 TREE PLANTING BOARD GAME

- OBJECTIVE:** Students will review and analyze the process of organizing and obtaining trees for the tree planting project.
- METHOD:** Students will create a Tree Planting Board Game using a modified flow chart which demonstrates the steps taken to plant a tree in public and private areas.
- MATERIALS:** Worksheet #11: TREE PLANTING BOARD GAME
- BACKGROUND:** Provide a review of the steps taken so far in organizing a tree planting. A complete flow chart is provided with this activity. Have students create a board game that can be used as a demonstration chart to show others how to develop a tree planting project. This review will cover the steps taken to identify the need for trees, to consider and select an appropriate site for a tree planting, to contact and work with property owners and governmental agencies and to appeal to organizations for donations of money or trees for the project. The activity also introduces the next section of this curriculum which emphasizes how to carry out a tree planting.
- Vocabulary: board game, flow chart
- ENRICHMENT:** Add bonuses and penalty squares to a competition to the game.
- Expand instructions to stimulate more complex ideas involved with making change in the community.
- Try the game out on other students, friends or parents. Make the game into a book cover.

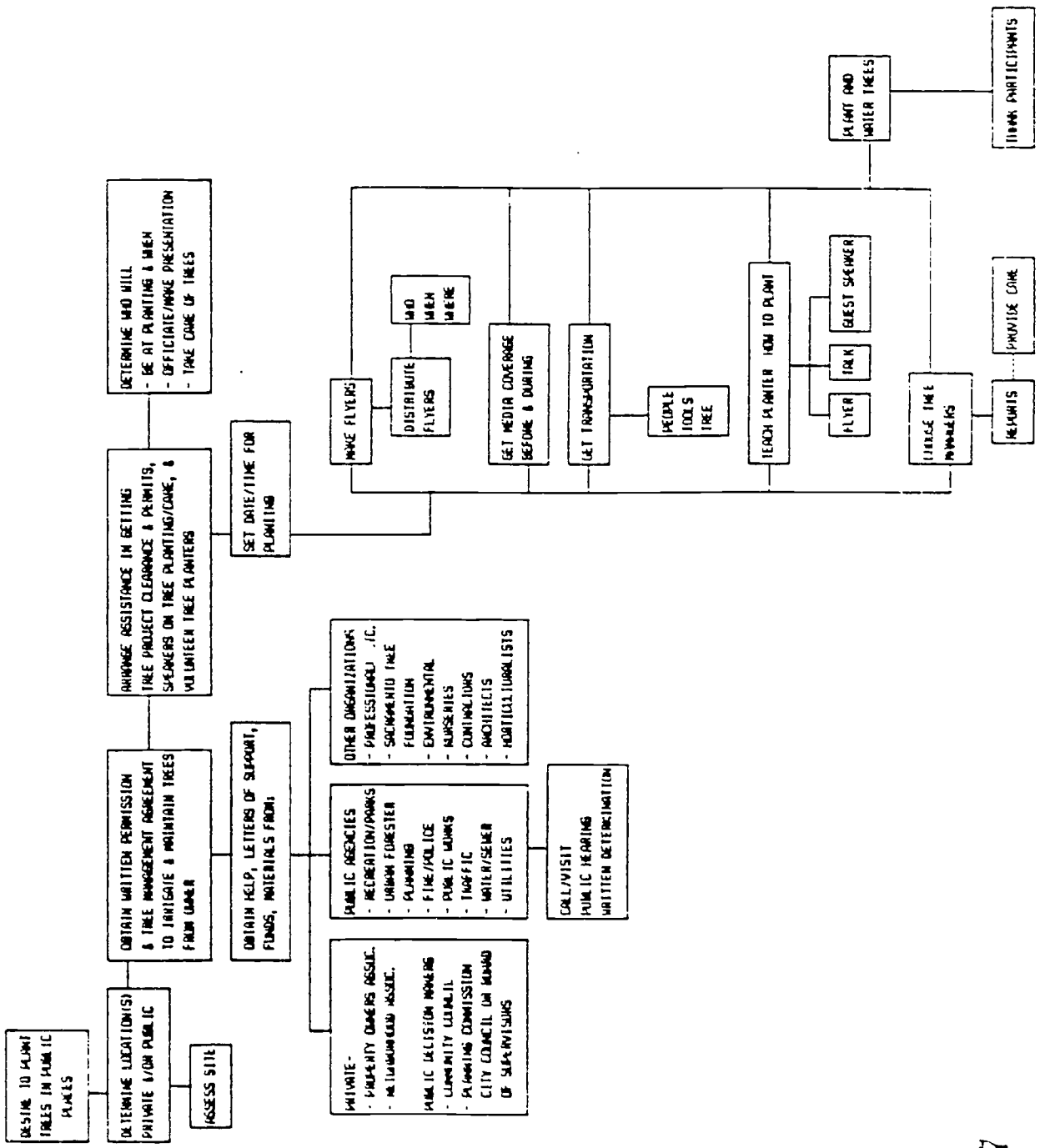
WORKSHEET #11 TREE PLANTING BOARD GAME

OBJECTIVE: Using this modified flow chart, the student will create a board game that uses the steps needed to organize a community sponsored tree planting. Arrange the steps in a logical sequence from start to finish. Provide instructions for playing the game.

START



TREE PLANTING FLOW CHART



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ACTIVITY #12 YOUR ROLE IN THE COMMUNITY (Volunteers and Civic Responsibility)

OBJECTIVE: Students will learn how volunteers affect change in the community and how they demonstrate civic responsibility.

METHOD: Students, as volunteers, will demonstrate civic responsibility by organizing and implementing a tree planting within their community. As a group, discuss the importance of volunteerism and the kinds of services they will be providing as volunteers.

MATERIALS: Worksheet #12: VOLUNTEERS AND CIVIC RESPONSIBILITY

BACKGROUND: Civic responsibility means caring about the community, believing you can make a difference by your actions. It also means having a vision of the kind of community you want to live in.

Volunteerism has been an American tradition for a long time. Alexis de Tocqueville wrote in Democracy in America,

"Among democratic nations, on the contrary, all citizens are independent and feeble; they can do hardly anything by themselves, and none of them can oblige his fellow men to lend him their assistance. They all, therefore, become powerless if they do not learn voluntarily to help one another."

He also said voluntary association was what made America different from Europe.

Community volunteers work directly with private and governmental organizations. As advocates for important programs and changes, volunteers can be a strong force in moving elected officials on many issues.

Volunteers can also offer public service by sharing skills, knowledge and abilities without receiving payment for their work. They can supplement paid staff by permitting expansion of services that would not otherwise be possible. They also bring with them an attitude that is positive and productive. Though volunteers do not receive payment, they do profit from the experience. Many employers regard volunteer work as job experience and volunteers have the chance to "sample" various careers.

Vocabulary: advocates, American tradition, careers, civic

ENRICHMENT: Ask students to contact community organizations and agencies (nature centers, museums, park districts, etc.) to find out what jobs are available for volunteers.

Discuss how youth organizations such as Scouts, 4-H, youth church and service groups can provide volunteer services to the community.

Ask a community volunteer to visit the class to discuss volunteer jobs and how they feel about them.

Study Alexis de Tocqueville's works and comment on his opinion of Americans and their view of civic responsibilities and other democratic traditions.

WORKSHEET #12 VOLUNTEERS AND CIVIC RESPONSIBILITY

OBJECTIVE: As a class, students will discuss their role as volunteers in organizing and carrying out a community tree planting. Complete this worksheet as a summary of the discussion.

1. List the kinds of volunteer services the class will provide by organizing and carrying out a tree planting for their community.
2. List the different job activities needed to carry out these services.
3. What career categories do these jobs belong to?
4. Explain how volunteers demonstrate their "civic responsibility" when performing a job without pay.

ACTIVITY #13 PROMOTING THE PLANTING

OBJECTIVE: Students will be able to publicize a tree planting event and learn how organizations use the media to create public awareness and influence public opinion about community issues.

METHOD: As teams, students list local newspapers, radio and television stations and other media sources. They will write news releases, public service announcements, letters-to-the-editor and posters or flyers.

MATERIALS: Worksheet #13: REACHING THE MEDIA
Local newspapers, telephone books; model news releases, public service announcements, letter-to-the-editor (samples provided); telephones, typewriters, art supplies for poster making activities.

BACKGROUND: Interest groups use the communications media extensively to influence opinion and create awareness. News releases are written for newspapers, radio and television. Letters are sent to newspaper editors and to law makers. Public service announcements are written for television and radio stations.

News releases and letters publicize the views of individual groups to create greater public awareness of the problem. Sometimes the topic is a controversial issue.

Public Service Announcements (PSAs) are sent out to publicize information or events of non-controversial nature that may be of general interest to the community. Posters can be created for the same purpose.

The media usually carries public interest stories. A class tree planting that enhances a public place can provide a good story or letter-to-the-editor.

Vocabulary: controversial, media

ENRICHMENT: Write letters to county supervisors, state legislators or other decision makers to invite them to attend the tree planting event. Invite an information officer from a local environmental organization, to discuss how he/she creates public awareness and influences public opinion about government/tree related issues.

Try Project Learning Tree activities:
#28 'Cartoons and Headlines' - students write headlines about some phase of forest management and related issues.
#29 'Wasted Words' - students describe the advantages and disadvantages of using emotionally loaded language when attempting to communicate effectively.
#30 'Environmental Editorials' - students team to recognize techniques of propaganda and persuasion used in mass media.

RESOURCES: Inform and Involve: American River Natural History Association (ARNHA), 1986.

WORKSHEET #13 REACHING THE MEDIA

OBJECTIVE: Students will publicize the tree planting event.

METHOD: Organize the effort by completing the following items:

1. Locate the names, aresses and phone numbers of the media resources that you will contact.
2. Draft the necessary announcements, letters, posters, etc. to announce the event.
3. As a class, select the best examples of each media form and distribute the appropriate media.

SUGGESTIONS FOR REACHING THE MEDIA

Community involvement goes hand-in-hand with public education through use of the print and the electronic media. Letters can be written to the editors of newspapers. News releases can be sent to newspapers, radio and television stations. When available, it's good to include a black and white photo (newspapers) or a slide or videotape (television) with your releases or public service announcement, to a some visual interest to the story.

Getting media coverage is not always easy. Each branch of the media has its own unique requirements. Some suggestions are listed below. Examples of news releases, public service announcements and letters are also included.

General Suggestions:

- * Write your release or public service announcement for a general audience. Consider that the more people it affects, the greater your chance of coverage.
- * Write clearly and simply.
- * Send in your release, public service announcement or letter, well ahead of the time you want the information to be published or broadcast (2 weeks to one month).
- * Plan the audio and visual portion of your story.
- * Use your imagination to create an interesting story angle that will catch the media interest.
- * Be persistent! Coverage may not happen every time you send out a news release.

MODEL FOR A NEWS RELEASE

Name of your Group
Address
Phone Number
Person to contact for more information

Date

FOR IMMEDIATE RELEASE

Title of Release

Your goal in this release is to alert the press and the public to an important problem in your community or school and what the group is doing to resolve it.

Be concise. Use action words and short sentences. List the most important information in the first paragraph, or: Who, What, Why, When, Where, How.

Less important information and explanatory details come in later paragraphs. If possible, use direct quotations from the leader of your group and/or from others who know details about the problem/solution.

Be accurate and honest. Do not exaggerate or slant the facts to support the views of your interest group.

Giving the reporters one short and one long news release allows them the choice of using it directly or as the basis for an expanded article or report.

(denotes end of release)

MODEL FOR A PUBLIC SERVICE ANNOUNCEMENT

Name of your Group
Address
Phone Number

FOR IMMEDIATE RELEASE

Your goal is to inform the public about a meeting or other event of public interest they may want to attend or know about.

Be concise. State who, what, why, when, where and how. Use high impact words that create an image people will remember.

###

Length: Time in seconds when read aloud. (Usually no more than 20 seconds, though some run 50 seconds)

Contact: Name and phone number of a person the radio or television station can call for more information.

SAMPLE OF A PUBLIC SERVICE ANNOUNCEMENT

Students for Trees
0000 Oak Lane
Forestville, CA 00000
(000) 000-0000

FOR IMMEDIATE RELEASE

Students for Trees invites you to plant a tree on Saturday, January 1, from 9 AM - 12 Noon, in Forrestville Community Park. There will be shovels and work gloves available and refreshments provided for all volunteers who attend.

Students for Trees has received a donation of 100 oak trees from the Forestville Nursery and welcomes the community to celebrate this donation by participating in the tree planting.

For more information: Call (000) 000-0000

###

Length: 20 seconds

Contact: Corky Oak, (000) 000-0000

MODEL FOR A LETTER TO THE EDITOR

Your Name
Name of Your Group
Address
Phone Number

Date

Name of the Editor
Name of the Newspaper
Address of the Newspaper

Dear (Name of the Editor)

First paragraph: State the name of the group you represent, its purpose or goal, and express your position on the problem or issue.

Second paragraph: Give a very brief history of the problem and description of the current situation.

Third paragraph: State your opinion about how the problem should be resolved and why (give reasons).

Fourth paragraph (optional if it applies to your situation): Urge attendance at a meeting or other action in relation to the problem in question.

Final: Thank you and closing with your signature.

LIST OF MEDIA SOURCES

NEWSPAPERS

Dailies:

The Sacramento Bee
2100 Q Street
P.O. Box 15779
Sacramento, CA 95825
(916) 444-6000

The Sacramento Union
310 Capitol Mall
P.O. Box 2711
Sacramento, CA 95814

Weeklies (examples):

Suttertown News
1731 L Street
Sacramento, CA 95814

Neighbors
(Supplement
to the Thursday,
Sacramento Bee, but
with a separate staff)

RADIO

KFBK AM 1530
KAER FM 92.5
1440 Ethan Way
Suite 200
Sacramento, CA 95825
(916) 929-3901

KGNR AM 1320
KCTC FM 96.1
2225 19th Street
Sacramento, CA 95818
(916) 441-5272

KEBR FM 100.5
3108 Fulton Ave.
Sacramento, CA 95821
(916) 481-8191

KSAC AM 1240
1021 Second Street
Sacramento, CA 95814
(916) 446-2294

KROY FM 97
620 Bercut Drive
P.O. Box 2424
Sacramento, CA 95811

KFIA AM 710
5738 Marconi Ave.
Carmichael, CA 95608
(916) 485-7710

KSMJ AM 1380
937 Enterprise Drive
Sacramento, CA 95825
(916) 929-5467

KRAK AM 1140
KSSK FM 105
3336 El Camino Ave.
Sacramento, CA 95821
(916) 482-7100

KWOD FM 106
777 Campus Commons
Road
Sacramento, CA 95825
(916) 929-5000

KXOA AM 1470
KXOA FM 107.9
1017 Front Street
P.O. Box 1677
Sacramento, CA 95808
(916) 446-4965

TELEVISION

KCRA Channel 3
310 10th Street
Sacramento, CA 95814
(916) 444-7300

KVIE Channel 6
2460 Garden Highway
P.O. Box 6
Sacramento, CA 95801

KXTV Channel 10
400 Broadway
P.O. Box 10
Sacramento, CA 95801
(916) 441-2345

KOVR Channel 13
1216 Arden Way
Sacramento, CA 95815
(916) 927-1313

KRBK Channel 3
500 Media Place
P.O. Box B
Sacramento, CA 95813
(916) 929-0300

KTXL Channel 40
4655 Fruitridge Road
Sacramento, CA 95801
(916) 454-4422

Sacramento Cable
4350 Pell Drive
Sacramento, CA 95838

Sacramento
Educational
Cable Consortium
1600 Sacramento Inn
Way, Suite 136
Sacramento, CA 95815
(916) 920-1006

ACTIVITY #14 HOW TO PLANT TREES

- OBJECTIVE:** Students will learn how to plant trees properly.
- METHOD:** Through classroom discussion, students will learn to prepare the planting site, dig appropriately sized holes, plant young trees, prepare water basins and place tree stakes for support. They will prepare a leaflet describing proper tree planting techniques.
- MATERIALS:** Worksheet #14: HOW TO PLANT A YOUNG TREE. Illustrations of proper tree planting techniques (refer to Tree Care - A Brief Guide to Planting and Maintenance of Trees, supplied with this curriculum.)
- BACKGROUND:** Use the STF "Tree Care" booklet for specific details on how to plant trees correctly. Also review the Site Inventory Checklist (Worksheet #6). Illustrations or visual aids are useful in describing how to plant a tree.

Use the following steps to demonstrate how a tree should be planted:

TREE PLANTING DIRECTIONS:

1. Remove the soil in the planting area 36" to 48" wide in either the shape of a circle or a square. Dig to a depth of 10" in the center of the hole and 16" to 18" on the sides.
2. Remove the tree's rootball carefully from its container and, with your hands, gently loosen any outside roots from the sides and bottom, taking care not to break or damage the rootball. Large, circling roots may have to be cut off.
3. Place the tree in the center of the hole on solidly packed soil so the root crown (where the tree's trunk meets the roots) is about 1" above your surrounding ground level.
4. After discarding any grass or weeds, partly backfill the hole with the soil you removed and lightly pack the soil into place around the rootball to eliminate air pockets and help support the tree.
5. Place fertilizer next to the rootball approximately 4" deep in the soil.
6. Finish backfilling the hole, but remember not to cover the root crown.
7. If your tree came with a nursery stake, remove it. Use two stakes and tie the tree so that it stands straight, yet can still flex in the wind.
8. Spread a 2" to 4" layer of mulch such as bark, wood chips or leaves over the entire planting area, leaving bare a 3" to 5" distance from the trunk.
9. With a shovel, create a berm for a water basin around your newly planted tree. The basin should be at least 36" wide with an edge built up to at least 4" high. This serves to conserve water and direct moisture to the tree's rootball.
10. Water thoroughly on planting day to soak the planting area.

ENRICHMENT:

Vocabulary: compost, crown rot, leader stem, rootball, soil amendments, stakes, water basin.

Invite a "tree expert" to demonstrate how a tree is planted.

Explore some of the problems trees have when improperly planted.

WORKSHEET #14 HOW TO PLANT A YOUNG TREE

OBJECTIVE: Students will explain, draw, or diagram how to plant a tree properly.

ACTIVITY #15 PLANTING DAY

OBJECTIVE: Students will successfully plan, implement, and evaluate their tree planting event; they will also plan for tree management.

METHOD: Students will carry out two activities:

1. Plan the tree planting event by:
 - a. Announcing the event (Activity #14).
 - b. Inviting dignitaries to the event
 - c. Preparing a celebration to follow the event (speakers, decorations).
 - d. Organizing who will actually plant the trees.
2. Carry out the tree planting day event.
3. Discuss the Sacramento Bee article and prepare a tree management plan.

MATERIALS: Worksheet #15A: A TREE PLANTING MAINTENANCE PLAN
Worksheet #15B: TREE PLANTING
Trees, shovels, stakes, tree ties, water
Materials needed for the celebration, student certificates.

BACKGROUND: Refer to and review the background discussions presented in Activities:
#10 TREE PLANTING BOARD GAME
#13 HOW TO PLANT TREES
#14 PROMOTING THE PLANTING

Once in the ground, the trees must be managed. (Refer to the Sacramento Bee 7 March 87) article which supports the need to provide a strong maintenance plan to insure the success of your tree planting. A maintenance plan should designate a group of students as tree managers. The Sacramento Tree Foundation can provide tree managers with technical assistance, educational materials and training opportunities on tree care and maintenance. These managers in turn will provide an ongoing tree management program according to a schedule. Seasonal reports need to be made and status reports written and sent to the Sacramento Tree Foundation's office (or other agency who has helped with the tree planting project). Use worksheet #12A to highlight the on-going maintenance requirements that must be monitored.

Vocabulary: maintenance, manager, schedules, status report

ENRICHMENT: Have students develop a special display on trees highlighting the value of trees in the urban environment.

After the tree planting, students should send photographs and articles to the school and community papers for post-event coverage.

RESOURCES: STF Tree Managers Workbook

WORKSHEET #15A TREE MAINTENANCE PLAN

Tree Managers: _____

Tree Maintenance Schedule (how frequent)

Dates																				
Water																				
Weeding (basin)																				
Stake/tie check																				
Stake/tie removal																				
Pruning needs																				
Tree inspection																				

Additional Comments:



WORKSHEET #15B TREE PLANTING

OBJECTIVE: After successfully participating in the tree planting every student will:

- a. Complete the following evaluation.
- b. Receive their completion certificate.

Read the statements below and answer them as thoroughly as possible.

1. Now my feelings about trees are...
2. Making decisions about how individuals use their land is...
3. Organizing and writing a proposal is...
4. Working together on a class project...
5. This project started me thinking about the possibilities of a career in...
6. I was interested in the presentation about...
7. My favorite activity during this project was...
8. My least favorite activity was...
9. I learned that I...
10. Thank you for...

CONGRATULATIONS ON YOUR SUCCESSFUL COMPLETION OF THIS TREE PROJECT!

APPENDIX

SACRAMENTO TREE FOUNDATION: A RECENT HISTORY

REFERENCES

RESOURCES

VOCABULARY

SACRAMENTO TREE FOUNDATION: CELEBRATING TEN YEARS

For a decade the Sacramento Tree Foundation, through partnerships with citizen organizations, business and government has inspired thousands of citizens to participate in volunteer efforts that are making their community healthier and more habitable.

It was in 1981 that Sacramento Mayor Phil Isenberg and County Board of Supervisors Illa Collin called together more than 125 civic, business and community leaders to introduce the concept for a community-based, non-profit organization to be called the Sacramento Tree Foundation. The reaction was enthusiastic and a steering committee was formed. Over the next 11 months more than 50 volunteers worked to develop by-laws, plans for financing, program goals, board nominations and a futures plan. On March 7, 1982, the 100th anniversary of California Arbor Day, Secretary of State March Fong Eu made a rare Sunday visit to her office to officially launch the Sacramento Tree Foundation as a non-profit community-based group.

As originally conceived, the Sacramento Tree Foundation was to be run by a board and committees made up entirely of volunteers. During its first year it sponsored several street, park and school plantings with assistance from the Sacramento County Tree Coordinator and a 25-member Technical Advisory Committee. It soon became evident that a half-time program coordinator should be hired to coordinate plantings, produce a newsletter, raise funds and perform other tasks as needed. Over 200 citizens became members, a heritage native oak contest generated over 400 entries and more than 40 local businesses began partnerships in support of the Tree Foundation.

Year of The Oak

In 1985 the Tree Foundation proclaimed the "Year of the Oak" for Sacramento County, and with community and governmental support organized the planting of 10,000 native oaks. The first citizen forestry summer youth employment program was launched and a special Rotary Grove was established in Discovery Park with 450 native shade trees. A part-time secretary and an education coordinator were added to the staff, while the executive director, Ann Kohl, continued to volunteer her time, talents and skills. The elementary school curriculum, "Seed to Seedling: Growing Native Oaks in the Classroom" was written and classroom tested. The annual children's poster contest grew to 1,500 entries.

In 1985 and 1986 the Tree Foundation began to place added emphasis on care and stewardship of the trees. The public demand for tree plantings and interest in learning how to give them proper care and protection continued to grow through the 1980's and by the end of 1989 the Tree Foundation had nine part-time staff members working with over 50 active volunteers in support of urban forestry projects.

Trees For Tomorrow

In 1990 a new and exciting citizens' group, Trees for Tomorrow, formally joined the Tree Foundation with the goal of inspiring Sacramentans to plant an additional one million trees as a gift for the 21st century. This new campaign received much needed assistance and inspiration from the Global ReLeaf and California ReLeaf programs.

Over its first eight years the Tree Foundation had grown from an average of one citizen-planted tree per day to about 2,000 a year. In 1990, responding to the ambitious new goal of planting a million trees, the Tree Foundation reorganized from a part-time to a full-time staff, while reemphasizing its commitment to volunteerism and community partnerships. These important new steps were barely in place when the Sacramento Municipal Utility District (SMUD) approached the Tree Foundation to form a Trees for Tomorrow partnership to sponsor the planting of 500,000 energy-saving shade trees through a citizen forestry effort over the next 10 years.

BEST COPY AVAILABLE

Community Partnerships

This significant partnership between SMUD and the Tree Foundation resulted in a rapid expansion in staff as well as a number of new community partnerships in the Trees for Tomorrow Campaign. Among them are 10-year commitments from the City and County of Sacramento to provide program funding and from the Sacramento Association of Realtors (SRA) to give staff support in organizing and caring for plantings. Toastmasters International members stimulated interest in tree planting by giving talks to community groups. Rotary funded special projects such as the planting of groves. Kiwanis, Lions and Soroptimist clubs signed on to provide funding for plantings at schools, colleges and facilities such as Ronald McDonald House and the Kiwanis Family House.

National organizations supporting the citizen forestry effort include American Forestry Association's Global Releaf Program, National Arbor Day Foundation, the National Urban and Community Forestry Assistance Program, the U.S. Forest Service Western Urban Forestry Research and Education Center and the Geo Environmental/Tree Program through a division of General Motors.

Program support is also provided by a statewide network of agencies and groups including the California Department of Forestry's Urban Forestry Program, California Releaf, California Urban Forestry Council, California Association of Nurseryman, International Society of Arboriculture, and the American Society of Landscape Architects.

While the Sacramento Tree Foundation highly values its national and statewide partnerships, it continues to look to the work, commitment and vision of hundreds of Sacramento volunteers. The Sacramento Tree Foundation mission, based upon the time-honored tradition of volunteer work and community service, can measure its breadth of activity in its major program areas: Trees for Public Places; SMUD/STF Shade Tree Program; volunteer recognition and support, youth and adult education and stewardship are integral aspects of these programs that perpetuate our urban forest.

Trees for Public Places

The Trees for Public Places Program has awarded 396 community grants, planted over 16,000 trees, graduated more than 300 volunteer tree managers, and engaged over 20,000 community members who have contributed more than 50,000 volunteer hours.

Shade Tree Program

The energy-saving Shade Tree Program has sponsored the planting of over 50,000 trees since October 1990, with over 350 planting demonstrations, the participation of 15,000 SMUD customers with 72 volunteers graduating as neighborhood foresters. This is the strong beginning of SMUD's commitment to plant half of the Trees for Tomorrow goal.

Seed to Seedling

The Seed to Seedling curriculum in elementary schools has taught more than 12,000 youngsters the joy and value of sprouting acorns into native oak seedlings in classrooms. Over the past ten years some 25,000 students have entered the Tree Foundation's annual fall children's poster contest. The curriculum has also been adapted to projects for senior citizens, convalescent home occupants, and inmates at correctional institutions.

The growing number and diversity of the Sacramento Tree Foundation's partnerships demonstrates the newly-recognized esthetic and practical value of citizen forestry--of planting and nurturing trees as a long-term contribution to the community and an investment that yields direct benefits. Dedicated citizens, working with nature instead of depending on expensive technology, are making their community healthier and more habitable. And in planting an urban forest they are saving significant amounts of energy, thus helping the local utility meet increased energy demands without the necessity of building a multibillion dollar 800 megawatt power plant.

REFERENCES

- A PLANTERS' GUIDE TO THE URBAN FOREST, Tree People, 1983.
- ALL ABOUT TREES, Ortho, 1982.
- DEMOCRACY IN AMERICA, Vol. 2:115-16, de Touqueville, Alexis, 1835.
- EXPLORING THE WORLD OF PLANTS AND SOILS, and WHAT'S A TREE TO ME, Cooperative Extension, University of California and U.S. Dept. of Agriculture 4-H projects.
- GROWTH STOCK - Trees for California, Office of Appropriate Technology, (State of Calif.)
- HERITAGE TREE ORDINANCE, City of Sacramento, Feb. 1980.
- HOW TO SAVE ENERGY NATURALLY By Using Trees, Shrubs, Vines, Groundcovers, Sacramento Municipal Utility District.
- INFORM AND INVOLVE: Land Use Decisions for grades 4-6. (Teachers Manual), Stevens, Kris, for The American River Natural History Association, 1986.
- MASTER TREE PLAN, Sacramento County, Oct. 1963.
- NEW WESTERN GARDEN BOOK, Lane Publishing (Sunset), 1979.
- PLANTS/PEOPLE/AND ENVIRONMENTAL QUALITY. A Study of Plants and Their Environmental Functions, Robinette, Gary O., Published by the U.S. Dept of the Interior, National Park Service, in collaboration with the American Society of Landscape Architects Foundation, 1972.
- PROJECT LEARNING TREE, Western Regional Environmental Education Council and the American Forest Institute, 1977.
- SACRAMENTO GOVERNMENT, The League of Women Voters of Sacramento, 1984.
- SACRAMENTO CITY OF TREES, The Sacramento Bee, George Dobbins, 1980.
- SACRAMENTO AREA LANDSCAPE TREES, U.C. Cooperative Extension, Sacramento County. Environmental Horticultural Notes 1986.
- SACRAMENTO'S OUTDOOR WORLD - A Local Field Guide, American River Natural History Association and Sacramento, County Office of Education, 1986.
- SEED TO SEEDLING, A tree propagation curriculum developed by the Sacramento Tree Foundation, Antunez de Mayolo, Kay, 1986.

SHOULD TREES HAVE STANDING? Toward Legal Rights for Natural Objects, Stone, Christopher D., 1974.

STATE OF THE TREES - 1979-1981, City of Seattle, Department of Engineering, March, 1982.

TREE CARE: A Brief Guide to the Planting and Maintenance of Trees. The University of California Cooperative Extension, Sacramento County and the Sacramento Tree Foundation.

TREE MANAGER WORKBOOK, Sacramento Tree Foundation, 1987.

TREES FOR BETTER NEIGHBORHOODS, Chevron Chemical Co. (Ortho).

TREES FOR SACRAMENTO'S STREETS, Sacramento Tree Foundation, 1987.

TREES: URBAN FORESTRY FOR CHILDREN, University of California Cooperative Extension - Sacramento County, Bone, Pamela S., 1984.

RESOURCES

Effie Yeaw Nature Center
2850 San Lorenzo Way
Carmichael, CA 95608
489-4918

Lawrence Hall of Science
University of California
Berkeley, CA 94720

Sacramento County Office of
Education
9738 Lincoln Village Drive
Sacramento, CA 95827
366-2717

Sacramento County Office of
Education Center for Law-
Related Education
9838 Lincoln Village Drive
Sacramento, CA 95827

Sacramento Science Center
3615 Auburn Blvd.
Sacramento, CA 95821
449-8255

Sacramento Tree Foundation
201 Lathrop Way
Suite F
Sacramento, CA 95815
(916) 924-8733

The League of Women Voters of
Sacramento
2206 K Street
Sacramento, CA 95816
443-3678

CURRICULUM RELATED RESOURCES

California Department of
Education
721 Capitol Mall
Sacramento, CA 95814
445-4688

COMMUNITY AND GOVERNMENTAL ORGANIZATIONS (INTEREST GROUPS)

American River Natural
History Association
(ARNHA)
P.O. Box 241
Carmichael, CA 95608
489-4918

American River Parkway
Foundation
P.O. Box 26566
Sacramento, CA 95825
456-7423

American River College
4700 College Oak Dr.
Sacramento, CA 95841
484-8011

Building Industry
Association of Superior
California
3780 Rosin Ct., Suite 290
Sacramento, CA 95834
925-2772

California Garden Clubs,
Inc.
Sacramento River District
c/o Martha Merner
4245 Zephyr Way
Sacramento, CA 95825

California Native Plant
Society
909 12th St.
Sacramento, CA 95814
447-2677

Capitol Park
10th and N Streets
Sacramento, CA 95814
324-0333

Cosumnes River College
8401 Center Parkway
Sacramento, CA 95823
686-7451

**Environmental Council of
Sacramento
909 Twelfth Street
Sacramento, CA 95814**

**Friends of the Urban
Forest
512 Second Street, 4th Fl.
San Francisco, CA 94107
(415) 543-5000**

**National Audubon Society
555 Audubon Place
Sacramento, CA 95825
481-5332**

**Planning and
Conservation League
909 12th St.
Sacramento, CA 95814
444-8726**

**Project Learning Tree
Kay Antunez , Area
Coordinator
California Dept. of Forestry
P.O. Box 944246
Sacramento, CA 94244-2460
(916) 653-7958**

**Recreation and Parks
Commission
c/o County Department of
Parks and Recreation
3711 Branch Center Road
Sacramento, CA 95827
366-2016**

**Sacramento City Planning
Department
1231 I Street
Sacramento, CA 95814
449-5571**

**Sacramento County
Planning Department
827 Seventh Street
Sacramento, CA 95814
440-6141**

**Sacramento County
Board of Supervisors
700 H Street
Sacramento, CA 95814
440-5411**

**Sacramento Audubon
Society
3615 Auburn Blvd.
Sacramento, CA 95821
449-8255**

**Sacramento County
Parks and Recreation
Department
3711 Branch Center Rd.
Sacramento, CA 95827
366-2016**

**Sacramento County
Public Works Department
[County Tree Coordinator]
827 7th Street
Sacramento CA 95814
440-6291**

**Sacramento City Parks
and Community Services,
[Tree Services]
5730 -24th Street
Sacramento, CA 95816
449-5304**

**Sacramento Convention
and Visitors Bureau
13111 I Street
Sacramento, CA 95814
442-5542**

**Sacramento Local
Conservation Corps
8401 Center Parkway
Sacramento, CA 95823
423-3139**

**Sacramento Metropolitan
Chamber of Commerce
917 Seventh Street
Sacramento, CA 95814
443-3771**

Sierra Club Sacramento
Valley-Sierra Group
1228 N Street, Suite 31
Sacramento, CA 95814
444-2180

Tree People
12601 Mulholland Dr.
Beverly Hills, CA. 90210
(818) 769-2663

University of California
Cooperative Extension,
Sac. Co.
4145 Branch Center Rd.
Sacramento, CA 95827
366-2013

VOCABULARY

- ACCOUNTABILITY:** Subject to furnishing a justifying analysis or explanation.
- ADVOCATES:** Persons who plead in favor of a cause or a viewpoint.
- AESTHETICS:** A pleasing appearance or effect.
- AFFECT:** To produce an effect upon (see effect).
- AGREEMENT:** Harmony of opinion.
- AMATEUR:** One lacking in experience or competence in an art or science.
- AMERICAN TRADITION:** An inherited, established, or customary pattern or thought, action or behavior typical of America.
- ASSESSOR'S PARCEL NUMBER:** That number assigned to an individual parcel or lot, by the county assessor.
- ASSUMPTION:** The supposition that something is true.
- BOARD GAME:** A game of strategy (as in chess or checkers) played by moving pieces on a board.
- BUFFER:** Something that serves as a protective barrier.
- CANOPY:** The upper most spreading branching part of a tree; provides shade and gives the tree a characteristic shape and appearance.
- CAREER:** A field for or pursuit of consecutive progressive achievement especially in public, professional, or business life.
- CIVIC RESPONSIBILITY:** Individual citizens participating in the governance of their community; taking part in making decisions and plotting direction of a community.
- COMMUNITY:** An interacting population of various kinds of individuals (as species) in a common location.
- COMPOST:** A mixture that consists largely of decayed organic matter and is used for fertilizer and conditioning soil.
- CONCESSION:** The admitting of a point claimed in argument.
- COOPERATIVE EXTENSION:** An educational agency of the University of California and the United States Department of Agriculture, serving all counties in California. Support is supplied by federal, state and county governments. It provides the people of California with the latest scientific information in agriculture and family consumer sciences, and also sponsors the 4-H Youth program.

COUNTY ASSESSOR: The county official who determines the rate or amount of property taxation.

CRITERIA: Standards on which a judgment or decision may be based. (Criterion = singular)

CROWN ROT: A disease caused by a soil fungus that attacks the bark on the crown just below the soil surface..

DECISIONS: Determinations arrived at after consideration.

DEVELOPER: A person who develops land/real estate; especially one that improves and subdivides land and builds and sells structures thereon.

EFFECT: To cause to come into being; power to bring about a result. (see affect)

ENHANCE: To add or contribute to.

EVAPOTRANSPIRATION: Loss of water from the soil both by evaporation (to give forth vapor) and by transpiration (excretion of water in the form of vapor) from growing plants.

FILTER: Passing through a porous material which separates out matter, light or sound.

FLOW CHART: A diagram that shows step-by-step progression through a procedure or system especially using connecting lines and a set of conventional symbols.

FOLIAGE: A cluster of leaves, flowers, and branches.

FOREST: A group of trees and underbrush covering a large tract of land.

GRANT: A gift, as of land or money, for a particular purpose that is formally transferred.

HABITAT: A place where a plant or animal naturally lives and grows.

INVENTORY: A survey of natural resources.

LAISSEZ FAIRE: A philosophy or practice characterized by a usually deliberate abstention from direction or interference especially with individual freedom or choice and action.

LAND USE: The actual use of the land such as apartment houses, or, orchard; as opposed to "planned" use such as high density residential, or agriculture.

LANDFORM: A natural feature of a land surface.

LANDSCAPE: The landforms of a region which form a characteristic appearance.

LEADER STEM: The upright tip of any plant which grows with a central trunk or stem.

LOBBY: To conduct activities aimed at influencing public officials and especially members of a legislative body on legislation. To attempt to influence or sway (as a public official) toward a desired action.

MASTER GARDENERS: Volunteers of the University of California Cooperative Extension Master Gardener Program, which provides information and technical assistance in the areas of home gardening and horticulture through the use of qualified and certified volunteers.

MODELS: Serving as patterns.

NATURAL RESOURCES: Materials such as minerals, water and air supplied by nature.

NEIGHBORHOOD: A section lived in by people immediately adjoining or relatively near each other and usually having distinguishing characteristics.

NON-PROFIT ORGANIZATION: An administrative unit, (as a business or political party) not conducted or maintained for the purpose of making a profit.

PARTICULATE: Solid particles or liquid droplets suspended or carried in the air.

PERCOLATE: To pass through or be diffused through a permeable substance such as soil.

PLANNER: One who uses established goals, policies and procedures for a social or economic unit (such as a city).

POLICY MAKER: One who creates a definite course or method of action to guide and determine present and future decisions.

POLLUTANTS: Undesirable materials (such as man-made waste) that change the physical, chemical or biological characteristics of the air, water or land and can have harmful affects on the health, survival or activities of humans or other living organisms.

PROFESSIONAL: One that is characterized by or conforming to the technical or ethical standards of a profession.

PROPOSAL: An act of putting forward or stating something for consideration.

PUBLIC INFORMATION: Knowledge or data obtained from investigation, study or instruction, which is accessible to or shared by all members of the community.

ROOT BALL: A "ball" of soil and roots, often as it comes from the container of a nursery grown tree.

SOIL AMENDMENTS: The materials that can add both air and water- retention to a soil: 1) mineral amendments (pumice, perlite, vermiculite) that are permanent in the soil; 2) organic amendments (ground bark, peat moss, leaf mold, manure etc.) that decompose under bacterial activity.

STAKES: Pointed pieces of wood or other material driven or to be driven into the ground as a marker or support.

TESTIFY: To make a statement based on personal knowledge or belief.

TRANSFORM: To change the outward form or appearance of something.

TREE MAINTENANCE WORKER: A person who usually works for a local parks agency who helps keep trees in public places healthy and safe.

TREE TRIMMERS: A person who trims trees in order to keep them healthy and safe.

TREE SUPERVISOR: That person who supervises tree maintenance workers, tree trimmers, etc.; often the head of the tree services division.

URBAN: Characteristic of a city.

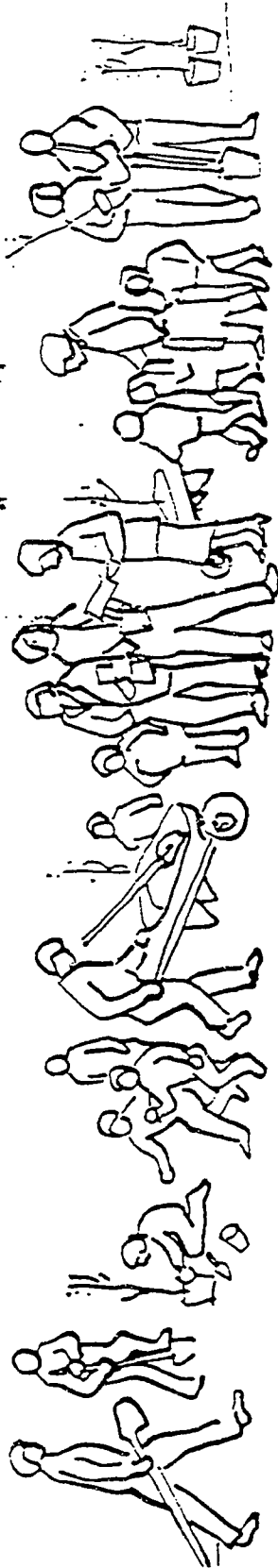
UTILITY COMPANY: A public or private company that provides a service (such as light, power or water).

VOLUNTEER: An individual who provides a service or completes a task without reimbursement or payment.

WATER BASIN: A generous area around the base of a tree which may be depressed or formed by a surrounding dike, and holds irrigation water.

WORKER : One that toils or labors especially at manual or industrial labor or with a particular material.

ZONING: Partitioning of a city, into sections reserved for different purposes, such as residence, business, or manufacturing.



**The Sacramento Tree Foundation
congratulates you for completing
the TREE PLANTING project.**

COMMENTS PLEASE!

Your contribution to the creation and fine tuning of this curriculum is welcomed!

The in-service meeting you are attending, gives you a taste of the curriculum and its intended uses. Please go over the entire curriculum and use some or all of it in your classroom in near future.

Your WRITTEN observations and remarks should be received by the authors As soon as possible.

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Copies of the final document will available for \$10.00, from the Sacramento Tree Foundation (a non-profit organization). Proceeds of the document will be used to plant trees in this community

Comments :
