



# TREES FOR TOMORROW

## Caring For Our Community Roots

### Benefits of Trees in Southeastern Oakland County

#### STORMWATER QUALITY

- Trees intercept and absorb stormwater, reducing runoff and soil erosion. One tree can reduce runoff by over 3,000 or more gallons per year.
- Trees loosen compacted soil and encourage stormwater infiltration into the ground.

#### AIR QUALITY & CLIMATE

- Trees release oxygen – enough for a family of four over a one year period.
- Trees store carbon, offsetting harmful byproducts of fossil fuel burning.
- Trees moderate the effects of sun, wind, and rain.
- Trees clean the air by trapping dust, pollen, and other pollutants.

#### ENERGY CONSERVATION

- Shade trees save up to 20% on summer air conditioning costs and 2% on winter heating costs.

#### PROPERTY VALUES

- Property values of landscaped homes are higher than those of non-landscaped homes. Individual trees also add significant value.

#### HABITAT & COMMUNITY IDENTITY

- Native trees help define the community's unique character and identity.
- Trees provide habitat for birds, pollinators and beneficial insects, adding to urban biodiversity.
- Trees have a restorative effect that can improve physical and mental well-being.

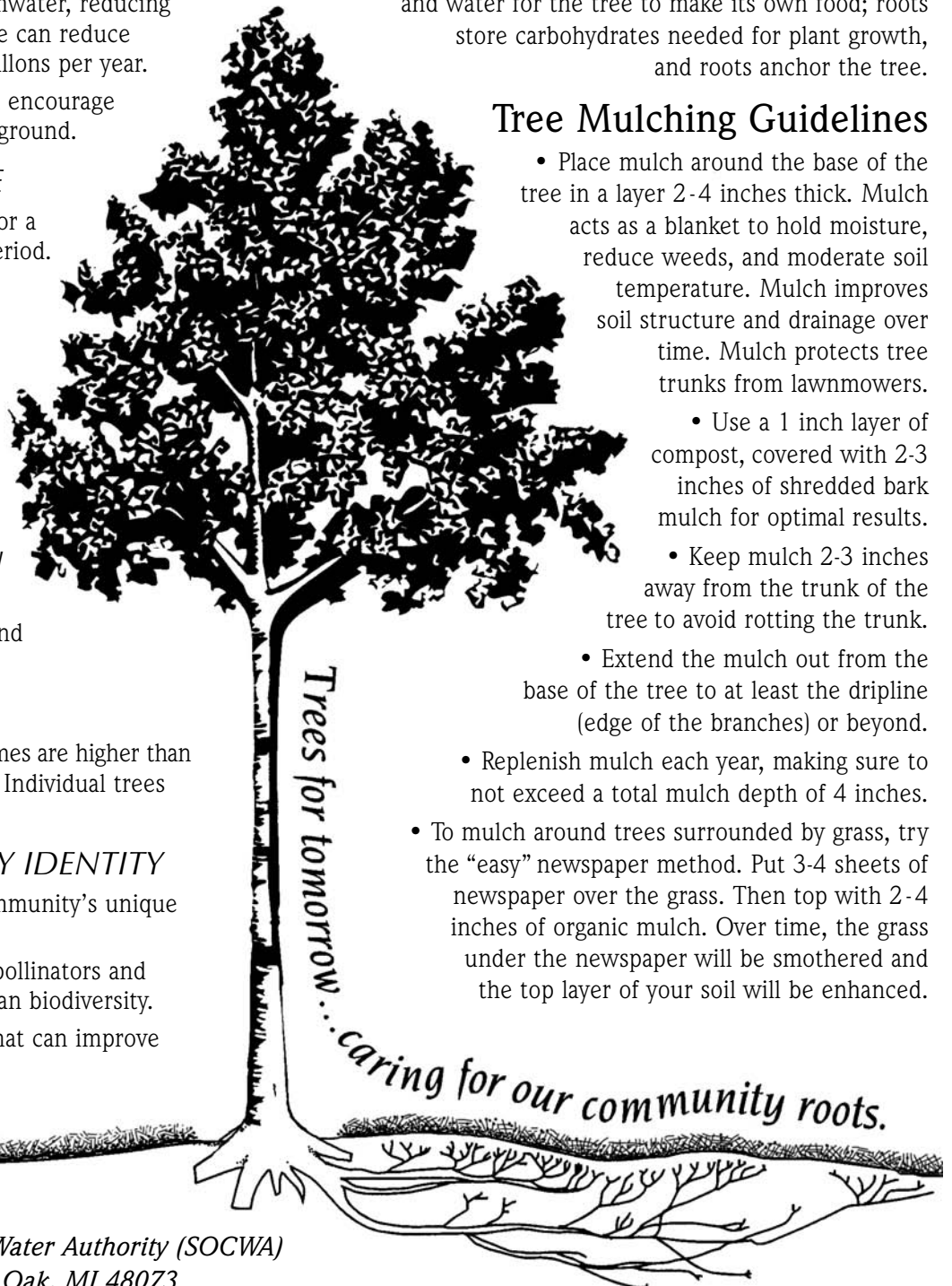
Prepared by the  
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### Roots...The Lifeline of the Tree

Over 85% of all tree roots grow in the top 18 inches of the soil. Tree roots extend out from the tree trunk, beyond the dripline of the tree canopy. Roots take up nutrients and water for the tree to make its own food; roots store carbohydrates needed for plant growth, and roots anchor the tree.

### Tree Mulching Guidelines

- Place mulch around the base of the tree in a layer 2-4 inches thick. Mulch acts as a blanket to hold moisture, reduce weeds, and moderate soil temperature. Mulch improves soil structure and drainage over time. Mulch protects tree trunks from lawnmowers.
  - Use a 1 inch layer of compost, covered with 2-3 inches of shredded bark mulch for optimal results.
  - Keep mulch 2-3 inches away from the trunk of the tree to avoid rotting the trunk.
  - Extend the mulch out from the base of the tree to at least the dripline (edge of the branches) or beyond.
- Replenish mulch each year, making sure to not exceed a total mulch depth of 4 inches.
- To mulch around trees surrounded by grass, try the "easy" newspaper method. Put 3-4 sheets of newspaper over the grass. Then top with 2-4 inches of organic mulch. Over time, the grass under the newspaper will be smothered and the top layer of your soil will be enhanced.



## Tree Planting Guidelines

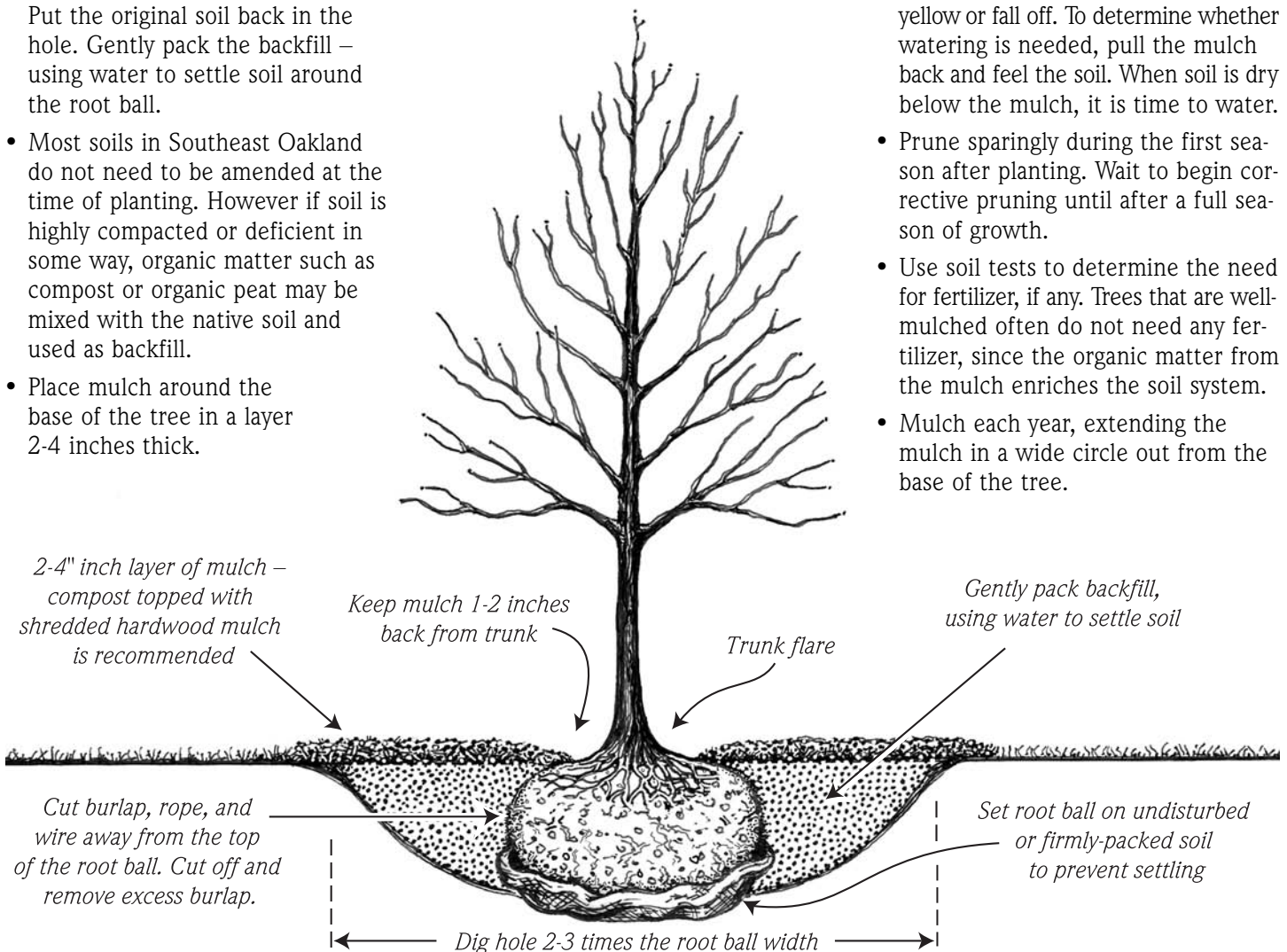
- Dig a shallow, broad hole, three times the diameter of the root ball – but only as deep as the root ball.
- Identify the root flare – where roots spread at the base of the tree. The root flare should be visible, just above the ground. If the tree is planted too deep, new roots will have difficulty developing due to lack of oxygen.
- Set the root ball on firmly-packed soil to prevent settling. Cut burlap, rope, and wire away from the top one-third (or more) of the root ball. Put the original soil back in the hole. Gently pack the backfill – using water to settle soil around the root ball.
- Most soils in Southeast Oakland do not need to be amended at the time of planting. However if soil is highly compacted or deficient in some way, organic matter such as compost or organic peat may be mixed with the native soil and used as backfill.
- Place mulch around the base of the tree in a layer 2-4 inches thick.

## Tree Selection

- Think diversity! Diverse tree species help balance the local ecology and reduce the possibility of pest infestations.
- Select trees suited to the conditions of the planting site. Consider sun/shade, drainage, soils and climate – before selecting your tree!
- Consider tree species native to Southeast Michigan. Native trees are well-adapted to local growing conditions. Native trees provide food and shelter for wildlife.

## Maintaining Healthy Trees

- Annually, inspect the tree to identify possible insect or health problems. *If you have questions, contact the Oakland County MSU Extension Garden hotline: 248-858-0902 or a certified arborist.*
- Water is the critical factor for tree survival after planting. Water trees at least once a week. Distribute water evenly over the root system and mulched area.
- Keep the soil moist but not soaked; over-watering causes leaves to turn yellow or fall off. To determine whether watering is needed, pull the mulch back and feel the soil. When soil is dry below the mulch, it is time to water.
- Prune sparingly during the first season after planting. Wait to begin corrective pruning until after a full season of growth.
- Use soil tests to determine the need for fertilizer, if any. Trees that are well-mulched often do not need any fertilizer, since the organic matter from the mulch enriches the soil system.
- Mulch each year, extending the mulch in a wide circle out from the base of the tree.



**Information Sources:** Brochures from the International Society of Arboriculture (ISA), "New Tree Planting" and "Proper Mulching Techniques"; Oakland County MSU Extension; Healthy Lawns and Gardens Technical Advisory Committee for Oakland and Wayne Counties. Prepared by Southeastern Oakland County Water Authority (SOCWA); 248-288-5150; [www.socwa.org](http://www.socwa.org). Funded through a grant from the Michigan Department of Natural Resources and the USDA Forest Service.

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