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FOREST STEWARDSHIP SERIES 19

Laws and Regulations Affecting Forests, Part I: Timber Harvesting

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The many laws and regulations that affect private forestland management in California are designed to protect public trust resources such as soils, water, and wildlife while permitting uses of private property. They also stipulate certain practices to assure long-term forest productivity. Private forestland ownership and the practice of forestry on private lands have been significantly influenced by state and federal laws, regulations, and court decisions.

This publication reviews important state and federal laws pertinent to forest management. It describes situations in which permits may or may not be required and summarizes the permit issuance process for commercial timber harvesting. The presentation of this complex topic is brief; the reader is advised to consult with regulatory agencies and a registered professional forester (RPF) about specific issues and applications of the laws. For other non timber activities, such as homesite development, water development, and so on, see Forest Stewardship Series 20: Laws and Regulations Affecting Forests, Part II.

Objective

Understand and identify permits or other authorizations required for forest management activities involving timber harvesting.

Competencies

- Familiarity with laws and regulations affecting forest uses.
- Familiarity with timber harvest planning under state regulations.
- Understand the responsibilities of landowners and their agents in complying with laws and regulations.

Related Forest Stewardship Series Publications

- *Professional Assistance*, ANR Publication 8254
- *Stewardship Objectives and Planning*, ANR Publication 8248

PUBLIC TRUST RESOURCES

Although land may be in private ownership, it is still subject to legal protections of “public trust” resources. These resources are protected for the benefit of the public, that is, the people of California and the United States. The resources include but are not limited to air and water quality, wildlife, and certain environmental resources such as tidelands and wetlands. The many laws that apply to natural resource management on private lands are designed to ensure that these public trust resources are not degraded. As a result of these laws, certain management activities are either prohibited or restricted under specific circumstances. Protection of public trust resources, for example, is the principle underlying the Forest Practice Act and the regulations of the State and Regional Water Quality Control Boards that aim to protect water quality and the beneficial uses of water while allowing timber harvesting.

CALIFORNIA STATE LAWS

The state laws that apply to forest management, and more specifically, timber harvesting, are founded on two principles: ensuring the long-term productivity of forest lands and preventing adverse environmental impacts.



Z'berg-Nejedly Forest Practice Act (FPA)

The 1973 California Forest Practice Act is designed to protect, enhance, and restore California's timberlands. It is recognized as the most comprehensive forest regulation statute in the United States. The purpose of this law is "to achieve maximum sustained production of high-quality timber products while giving consideration to values relating to recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment and aesthetic enjoyment" (Public Resources Code § 4513b). The regulations authorized by this law define the size and location of harvest areas, as well as matters such as protection of riparian corridors and archaeological sites, timing of harvest during wildlife nesting periods, locations of roads, and operations during certain seasons to protect wet soils.

California Forest Practice Rules (CFPR)

The FPA is implemented through a series of regulations called the California Forest Practice Rules (CFPR). These are lengthy in scope and detail and provide explicit instructions for permissible and prohibited actions that govern the conduct of timber operations in the field. For example, the FPRs define the contents of a timber harvesting plan (THP). A THP is the formal environmental review document that must be prepared by an RPF and approved by the California Department of Forestry and Fire Protection (CAL FIRE) prior to any commercial harvesting of timber in the state.

The rules cover the following major categories:

- THP review, appeal, and enforcement processes.
- Silvicultural systems and regeneration methods.
- Harvesting practices and erosion control.
- Site preparation.
- Watercourse protection.
- Sensitive watershed designation.
- Functional wildlife habitat and late-successional forest protection.
- Hazard reduction.
- Fire protection.
- Forest insect and disease protection practices.
- Logging roads and landings.
- Cumulative effects analysis.
- Long-term sustained yield plans.
- Special rules for specified counties and other areas.

The CFPR vary by region of the state. California is divided into three districts (Northern, Southern, and Coast), whose exact boundaries can be found in the California Forest Practice Rules.

A copy of the complete CFPR can be purchased at your local CAL FIRE office or obtained from the CAL FIRE Web site, <http://www.fire.ca.gov/>.

California Endangered Species Act (CESA)

The California Endangered Species Act (CESA) is similar to the federal Endangered Species Act (ESA), which is discussed later in this publication. CESA complements the ESA by prohibiting unauthorized "take" (e.g. hunt, pursue, catch, capture or kill) of birds, mammals, fish, amphibians, reptiles, and plants that are listed by the state as threatened, endangered or as a candidate for listing. CESA's definition of "take" is narrower than what is specified in ESA: it does not include the term "harm" or "harass," but it is interpreted to apply to indirect causes of death of listed species, such as through habitat modification or degradation.

A species can be listed as either threatened or endangered. The factors that contribute to determining the need to list a species as threatened or endangered include

the present or threatened modification or destruction of habitat, competition, predation, disease, overexploitation by collectors, or other natural occurrences or human-related activities.

CAL FIRE is required to consult with the California Department of Fish and Game (DFG), the US Fish and Wildlife Service (FWS), or the National Marine Fisheries Service (NMFS) to ensure that any action it undertakes is not likely to jeopardize any candidate or listed species or result in destruction or adverse modification of essential habitat.

Because many threatened and endangered species are found primarily on private lands, landowners may be subject to regulation under state or federal laws. Permitting procedures exist and are usually implemented as part of other permitting activities, such as THP approval. A list of all state and federal threatened or endangered species is provided at the DFG Web site, <http://www.dfg.ca.gov/whdab/TEAnimals.pdf>.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Act is the primary vehicle for implementation of California's responsibilities under the federal 1972 Clean Water Act. It grants the California Water Resources Control Board (SWRCB) and Regional Water Quality Control Boards (RWQCBs) broad power to protect water quality. These agencies have the authority and responsibility to adopt plans and policies, regulate discharges to surface water and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants.

There are nine RWQCBs throughout the state; each has a water quality plan for their region. As discussed below, state and regional board staff are involved in the review and approval of THPs. They are also involved in permitting forest management activities such as herbicide applications, and they enforce certain provisions of erosion control in watersheds subject to total maximum daily load (TMDL) restrictions.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) fosters interagency coordination to review all projects that have the potential for significant environmental effects (including timber harvesting) and to enhance public participation in the planning process. CEQA requires preparation of environmental documents including environmental impact reports (EIRs) to disclose significant effects of proposed activities and identify measures to avoid and reduce environmental damage.

CEQA applies to any project that is undertaken by a state agency or with the support of a state agency, or when an applicant obtains a lease, permit, license, or entitlement from a state agency. It has been determined that a THP is the functional equivalent of an EIR. Consequently, as with an EIR, a THP must discuss all feasible alternatives and disclose to the public why a certain alternative is chosen.

FEDERAL LAWS

Endangered Species Act

The Endangered Species Act (ESA) was enacted in 1973 to curtail the extinction of threatened and endangered fish, wildlife, and plants by providing landowners with programs to encourage the conservation of listed and threatened species and the habitats they use. This Act was based on Congress' recognition that native species "are of aesthetic, ecological, educational, historical, recreational, and scientific value to the Nation and its people" (Title 16 United States Code § 1531(a3)).

The ESA defines threatened species as those that, "although not presently threatened with extinction, are likely to become endangered species in the foreseeable future

in the absence of special protections and management efforts” (Title 16 United States Code § 1532(6). Endangered species classification also considers whether extinction of a species is likely “throughout all, or a significant portion, of its range” (Title 16 United States Code § 1532(20).

The ESA affects private landowners when a project involves federal funding or permitting. Implementation of ESA provisions is in some cases bolstered by the application of the California ESA. For most landowners in California, the ESA comes into play when THPs are proposed in habitats identified as critical for listed species.

Several programs are available to landowners under the ESA that encourage protection of threatened and endangered species. These programs offer landowners information, support, and funding for the conservation of listed species and their habitats.

For more information, contact the DFG at <http://www.dfg.ca.gov>, the FWS at <http://fws.gov/endangered>, or, for threatened and endangered anadromous fishes, the NOAA, Fisheries at <http://www.nmfs.noaa.gov>.

Clean Water Act (CWA)

Overall, the CWA is intended to restore and maintain the chemical, physical, and biological integrity of the nation’s waters. Water pollution is caused by point and nonpoint sources. Point sources are associated with a specific and identifiable activity such as the pipe outfall from a sewage treatment plant. Nonpoint sources are associated with general areas or activities such as agriculture, timber harvesting, road systems, and urban areas, and as such, are inherently more difficult to identify and control. The Clean Water Act amendment to the Water Pollution Control Act in 1972 was the first federal legislation to address nonpoint source water pollution in its now-famous Section 208.

Over half of the pollution in the nation’s water bodies is caused by nonpoint sources. Nonpoint pollution comes from diffuse activities such as agriculture, forestry, mining, urban development, and construction. Examples of nonpoint pollutants include excess fertilizers, herbicides, and insecticides from agricultural lands and residential areas; and sediment from improperly managed construction sites, cropland, forestlands, and roads.

Nonpoint source pollutants can have harmful effects on drinking water supplies, recreation, fisheries, and wildlife. In California, the agencies responsible for implementing the CWA are the California Water Resources Control Board and Regional Water Quality Control Boards (see the section on the Porter-Cologne Water Quality Control Act, above).

Many California streams have been listed under Section 303(d) of the Clean Water Act as impaired by pollution, even after application of pollution controls. In some instances the impairment is from nonpoint sources and has resulted in excessive sediment, temperature, or a combination of both.

For those waters that are impaired, states must establish a TMDL of pollutant discharge to a watercourse to ensure attainment of water quality standards. It is important to determine if your property is in a TMDL watershed. If so, your management plans should take into account the sensitivity of the watershed to ensure that your actions will not cause further impairment. To determine if your property is located within a TMDL watershed, contact your local RWQCB or visit the SWRCB Web site at <http://www.waterboards.ca.gov/tmdl>.

REGULATION OF COMMERCIAL TIMBER HARVEST

Any harvesting of logs offered for sale, barter, exchange, or trade or harvesting done as part of the conversion of timberland to a nontimberland use requires a permit pursu-

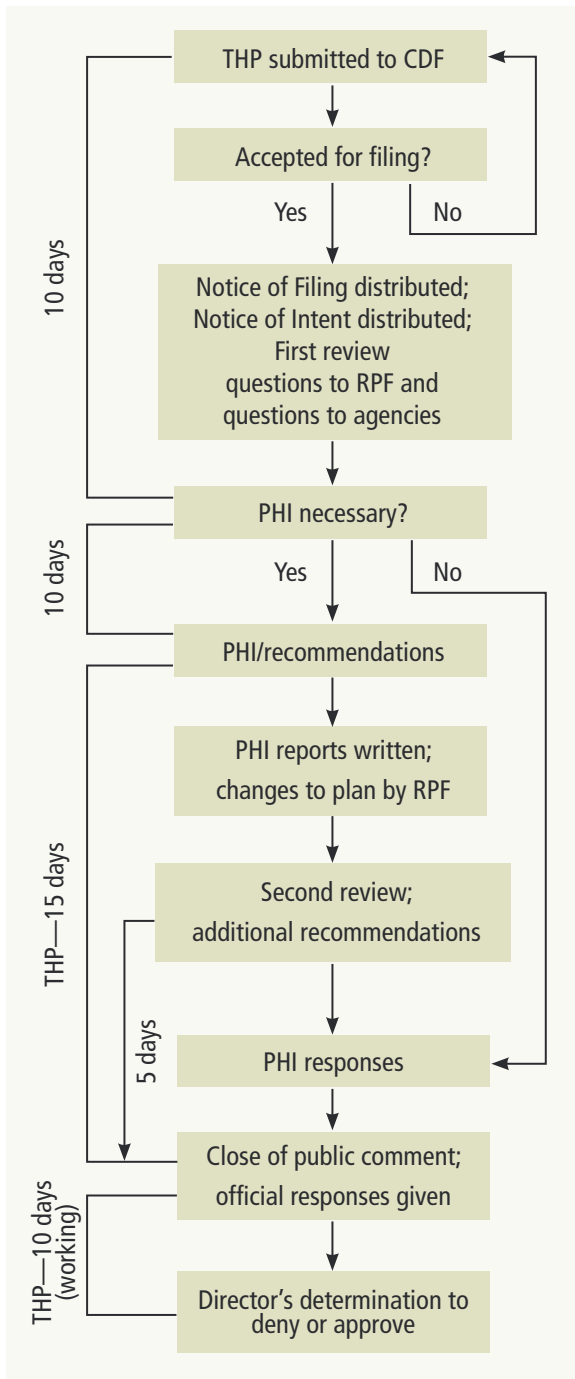


Figure 1. Flow diagram of a theoretical timber harvest permit review process from RPF submission of the THP to approval. *Source:* Courtesy CAL FIRE.

ant to the California Forest Practice Act. There are two main permits and some permit exemptions under special circumstances. A THP is required for a single commercial harvest. A nonindustrial timber management plan (NTMP) is a permit that applies to an entire property in perpetuity, subject to conditions incorporated into the permit. Rules and limitations apply to both permits. The permits are similar in that they both are functionally equivalent to an EIR under CEQA; each must conform to the FPRs in effect; and each must be prepared by a RPF licensed by the State of California.

Both the THP and NTMP describe existing conditions, proposed activities, impacts to environmental resources, and how those impacts will be minimized or mitigated. A great deal of emphasis is placed on adequate regeneration of growing stock (trees), protection of water resources (such as streams, ponds, and domestic water supplies), minimizing erosion, protecting archaeological resources, protecting wildlife, and ensuring that members of the public have an opportunity to comment on the proposed activities.

Either type of permit usually takes approximately 6 to 18 months to complete and process depending on the size and complexity of the proposed harvesting and the resources potentially affected. The cost for either is extremely variable, depending on the specifics of the situation such as the type of wildlife or botanical resources that may need to be surveyed for. The NTMP usually has higher initial costs but may realize some future cost savings once it is approved, since there is no need to prepare a separate THP for each successive commercial harvest.

A THP is valid for 3 years and can be extended for an additional 2, for a total life of 5 years. After that time, a new THP must be prepared to harvest timber on that property.

An NTMP is valid in perpetuity, requiring that CAL FIRE be notified before operations begin. The forester preparing the plan must conduct an inventory of the property and use that data to model the forest's future growth and ensure that harvest will not exceed growth over. Inventory reports must be presented to CAL FIRE periodically. Thus, the NTMP is a type of sustained yield plan. An NTMP is available only to landowners who own less than 2,500 acres and limit management activities to certain practices.

The following discussion of the regulatory procedures applicable to commercial timber harvesting applies only to a THP. For further information on the NTMP process or on the FPR, see the CAL FIRE Web site at <http://www.fire.ca.gov>. For a flow chart that illustrates this process, see [figure 1](#).

Timber Harvest Plan Review

After your THP is prepared, a notice of intent is posted at the public road nearest your plan area. This two-page notice must

be placed in a readily visible location and provide basic information about your plan, including a map. The notice is also submitted to CAL FIRE, the regulatory agency that enforces the FPR. CAL FIRE distributes the notice of intent to all neighbors within 300 feet of your plan boundaries. The notice is also sent to the local CAL FIRE ranger unit and to the county clerk, where it is made available for public review.

Filing and First Review

CAL FIRE reviews all THPs to ensure they are complete and in proper order. Plans that are accepted for filing receive a plan number. Plans not accepted are returned to the RPF, who will make the needed changes before resubmitting the plan.

After the plan is accepted for filing, a first review is held. This is an office review and is open to representatives from CAL FIRE, DFG, RWQCBs, the California Department of Mines and Geology, the California Department of Parks and Recreation, a state archaeologist, the county planning agency, and anyone else who has made a written request.

Agency representatives put together a list of questions and concerns, some for the RPF and some for agency personnel to answer. The RPF receives the list of first review questions and answers questions directed to them.

After the first review, a notice of filing is sent to the RPF, the plan submitter, public agencies with custodial responsibility for lands within 300 feet, the local CAL FIRE ranger unit, and the county clerk for posting in a public place.

From the time CAL FIRE receives your THP or NTMP, a total of 10 calendar days are allowed for filing, the first review, and a determination of whether or not a preharvest inspection is necessary. The public comment period opens during this 10-calendar-day period.

Pre-Harvest Inspection

In most cases, a preharvest inspection (PHI) is deemed necessary. Although CAL FIRE has 10 calendar days in which to schedule and conduct a PHI, most RPFs are asked to request an extension in order to accommodate the schedule of CAL FIRE and other agency inspectors.

PHIs typically take 1 or 2 field days to complete. The RPF meets staff from various agencies to discuss the specifics of the plan and together work out solutions to any issues that arise. The landowner may participate in this inspection process and can help in explaining the intent of the proposed actions and property history.

After the PHI, agency staff report their observations and recommendations. Sometimes a THP will have several PHI reports from different agencies. A copy of these reports and recommendations is sent to the RPF, who may agree to these recommendations or propose changes to them.

Second Review

Following the PHI, the review team agencies have 15 calendar days to draft their reports and conduct a second review of the plan. The second review is a second office review by agency personnel. The staff review the THP originally submitted, the PHI reports, the responses of agency personnel to first review agency questions, the responses of the RPF to the first review questions, and public comments received to date. The RPF may choose to attend the second review to be able to respond immediately to mitigation measures proposed by agencies for potential impacts.

The result of second review is a list of mitigation measures or other changes to the plan. These are sent to the RPF. If the RPF is in agreement with all the measures, the RPF signs each page and simply returns the signed pages to CAL FIRE. If the RPF is not in agreement, the RPF proposes changes to the measures. Any such changes typically further delay the plan approval process.

Public Comment

The public comment period begins when the plan is accepted for filing. Following the second review, public comment is accepted for 5 additional days. This may extend the total time from the end of the PHI to the close of public comment to more than 15 days.

Any member of the public may submit comments on the plan. At the end of the public comment period, CAL FIRE prepares official responses to written comments received. The comments and responses become part of the official file.

Director's Determination and Permit Approval

Following the close of public comment the director of CAL FIRE has 10 working days to determine whether the plan is in conformance with the FPR. If the plan is approved, a notice of conformance is sent to the people who received a notice of filing and to the reviewing agencies.

Timber operations may begin immediately after plan approval. Minor and major amendments may be added to the plan; major amendments require reopening the public comment period. CAL FIRE may conduct inspections during active timber operations.

Postharvest Requirements

After timber operations are completed, the landowner or plan submitter is responsible for postharvest activities and maintenance. Highlights of timber and timberland owner responsibilities include the following.

- Within 1 month after completion of operations, a work completion report must be filed with CAL FIRE.
- Restocking requirements must be met within 5 years after harvest. When restocking is met, a report of stocking form must be submitted to CAL FIRE.
- Erosion control devices must be maintained for 1 to 3 years after approval of a work completion report.
- Any change in ownership must be reported to CAL FIRE. The new owners must be informed about the stocking requirements.
- CAL FIRE must be notified within 5 days about the substitution of another RPF or change in RPF responsibilities.
- The landowner or RPF must provide a copy of the approved THP and amendments to the licensed timber operator (LTO) conducting the operation.
- CAL FIRE must be notified before site preparation activities begin.

When a Permit Is Not Required

In certain specified situations, exemptions, emergency notices and conversion exemptions allow landowners to harvest timber without preparing a THP ([table 1](#)). Note that all exemptions and emergencies require that the proper forms be filed with CAL FIRE. It is important to note that these are exemptions from filing a THP, and that the rules and regulations governing timber harvest, road construction, reforestation, watercourse protection, environmental protection, and so forth still apply. An RPF is required to sign some, but not all, of these exemption forms.

Table 1. Summary of exemptions allowed by forest practice regulations

	Purpose					
	Christmas trees	Dead/dying/ diseased	Fuelwood/split products	Removal of fire hazard trees	Substantially dam- aged not for sale	<3 acre conversion
Form (Section #)	RM-73 (1038ab)	RM-73 (1038ab)	RM-73 (1038ab)	RM-73 (1038c)	RM-73 (1038e)	RM-73 (1104.1a)
Acre limit	none	none; limited to 10% of the average volume/acre	none; limited to 10% of the average volume/acre	within 150 feet of permitted structure	none	<3 acres one-time/ ownership
Cut live trees	yes	no	yes	yes	no (see exception rules)	yes
Need RPF	no	no	no	no	no	yes
Trees marked	no	no	no	yes	no	no
Approval time	received by CAL FIRE before operations begin	received by CAL FIRE before operations begin	received by CAL FIRE before operations begin	5 working days from the receipt by CAL FIRE; wait for notice	5 working days from the receipt by CAL FIRE; wait for notice	wait for notice of acceptance; must have in hand before operations
Work completed w/in	1 year	1 year	1 year	1 year	1 year	1 year (logging); 2 years to complete conversion
Notify CAL FIRE	no	no	no	yes	no	no
Notify neighbors	no	no	no	no	no	yes
Permit posted	no	no	no	yes	no	yes
Silviculture limitation	none	can cut <10% volume	can cut <10% volume	some	must meet definition for substantially damaged timberland	none
Stocking report	no	no	no	no	no	work completion
Comments		many special rules; see 1038(b)	many special rules; see 1038(b)	strict slash cleanup required	many special rules; see 1038(b)	many special rules

Exemptions

- Harvesting dead, diseased, or dying trees where less than 10 percent of the average stand volume per acre is removed.
- Harvesting dead trees from damaged timberlands (for example, after a wildfire).
- Harvesting to create or maintain a firebreak.
- Harvesting Christmas trees.

Emergency notices

- Cutting or removing trees that are dead or dying as a result of insects, disease, parasites, or animal damage.
- Cutting or removing trees that are fallen, damaged, dead, or dying as a result of wind, snow, freezing weather, fire, flood, landslide, or earthquake.
- Cutting or removing trees that are dead or dying as a result of air or water pollution.
- Cutting or removing trees required for emergency construction or repair of roads.

Conversion Exemptions

- One-time conversion of land use of up to 3 acres (for example, from forest to a home site).
- Construction or maintenance of right-of-way by a public agency on its own or any other public property.

- Clearing of trees from timberland by a private or public utility for construction of gas, water, sewer, oil, electric, or communications rights-of-way, and for maintenance and repair of the utility and right-of-way.

Other Commonly Needed Permits Associated with Forest Management

Lake and Streambed Alteration Agreements (1600 Agreements)

The DFG regulates activities that may affect streams and other watercourses. The main purpose of regulation is to prevent changes to waterbodies that may adversely affect habitat for aquatic wildlife. The regulation process yields what are known as “1600 agreements.” These are not permits, strictly speaking, but rather agreements between DFG and landowners that serve as conditions on the proposed activity. Many forestland owners will find themselves having to obtain a 1600 agreement in order to

- divert, obstruct, or change the natural flow of any river, stream, or lake (such as placing or replacing a culvert or repairing a road even if it is funded through a restoration grant)
- use materials from a streambed, such as gravel
- dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement into any river, stream, or lake

When planning an activity that will require a 1600 agreement, a landowner must submit notification to DFG for evaluation and CEQA review. Before submitting the notification package and fees, it is a good idea to contact your local DFG office to discuss the proposed project and determine whether notification is necessary and whether there are any concerns regarding the project. DFG may suggest ways to reduce impacts to fish or wildlife before you submit your proposal. For more information see the DFG Web site, <http://www.dfg.ca.gov/whdab/1600.html>.

Smoke Management Plans (SMP): California Air Resources Board

In addition to the required burn permits issued by CAL FIRE, California’s Smoke Management Program addresses potentially harmful smoke impacts from agricultural, forest, and rangeland management burning operations.

For forest landowners who want to burn vegetation, it may be necessary to develop a smoke management plan (SMP). These are required for all burn projects that are larger than 10 acres or are estimated to produce more than 1 ton of particulate matter. At a minimum, the following information is required for the plan:

- location, types, and amounts of material to be burned
- expected duration of the fire from ignition to extinction
- identification of responsible personnel, including telephone contacts
- identification and location of all smoke-sensitive areas

More information can be obtained at the California Air Resources Board Smoke Management Program Web site, <http://www.arb.ca.gov/smp/regs/regs.htm>.

ENGLISH–METRIC CONVERSIONS

English	Conversion factor for English to Metric	Conversion factor for Metric to English	Metric
inch (in)	2.54	0.394	centimeter (cm)
foot (ft)	0.3048	3.28	meter (m)
yard (yd)	0.914	1.09	meter (m)
mile (mi)	1.61	0.62	kilometer (km)
acre (ac)	0.4047	2.47	hectare (ha)
square mile (mi ²)	2.59	0.386	square kilometer (km ²)
pound (lb)	0.454	2.205	kilogram (kg)
ton (T)	0.907	1.1	metric ton (t)

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