

Appendix B

Table B1. Land use and cover definitions by categories and codes for Land-Use Study wells.

Land use and cover	Category	Subcategory	Code	Comments
RANGELAND	Grassland	None	rng.grs	Refers to open lands, mainly found in the West, that historically were part of the open range. Considered distinct from pasture or high-density livestock areas, such as feedlots (See livestock under Agriculture). Mixed rangeland are areas where neither the grassland or tree and shrubs cover more than 75 percent of the area.
	Tree and shrub	None	rng.tsh	
	Mixed rangeland	None	rng.mix	
FORESTLAND	Deciduous	None	for.dec	Forested lands include protected Federal, State, or private wilderness, old growth, or natural areas, as well as parks, watershed and other reservoir-protection areas, or long-term forest growth areas. Mixed forest is defined as an area where neither the deciduous or coniferous species cover more than 75 percent of the area. Forested lands are distinct from: (a) landscape production (see Nursery and greenhouse, sod for sale under Agriculture), (b) pasture land containing trees, but primarily covered with forage for livestock (see Cover crops under Agriculture), and (c) city or residential parks (see Recreation under Urban).
	Coniferous	None	for.cnf	
	Mixed forest	None	for.mix	
WATER	Open	None	wat.opn	Open water includes natural lakes, streams, estuaries, bays, and oceans. Wetlands areas are not included (see WETLANDS) in open water.
WATER	Storage		wat.str	Water storage includes artificial ponds, lakes, reservoirs, areas to store urban runoff, storm retention or detention areas, irrigation return-flow, sewage and tailings lagoons or ponds.

Land use and cover	Category	Subcategory	Code	Comments
WETLAND	Woody wetlands	None	wet.www	Include artificial, as well as natural, areas but only if former are not designed chiefly for waste-water treatment--for example, urban storm-retention or tertiary sewage treatment, which are considered under Urban land use and cover definitions and codes. These wetland subcategories are defined by Cowardin and others (1979). Woody wetlands are areas where forest and scrubland vegetation accounts for 25-100 percent of the cover and the soil or substrate is periodically saturated with or covered with water.
	Emergent herbaceous wetlands	None	wet.weh	Emergent herbaceous wetlands are areas where perennial herbaceous vegetation accounts for 75-100 percent of the cover and the soil or substrate is periodically saturated with or covered with water.
	Mixed	None	wet.mix	Mixed wetlands
BARRENLAND	None	None	brl.nat	Exposed lands including rocks, dunes, or beaches that lack vegetative cover because of natural processes--volcanic, climatic, eolian, or pyrrhic events. Distinguished from land temporarily made barren by development--construction, plowing, blasting, mining, or overgrazing, which is described under targeted land uses.
URBAN	Residential	Single-family housing	urs.sfh	Typical suburban one-family one-residence development. Also, includes mobile homes and duplexes.
		Multi-family housing	urs.mfh	Multi-family single-residence units, separated and adjacent to one another-- fourplexes, row houses, and condominiums. Multi-story apartment building or high-rise, solo, or in combination with other similar types of residences.
		Mixed residential housing	urs.mix	Mixed residential is defined as an area where neither the single-family or multi-family housing covers more than 75 percent of the area.

Land use and cover	Category	Subcategory	Code	Comments
	Commercial	Commercial and retail sale and services, social and community services health and related services, and education and related services	ucs.mix	Includes commercial and retail sale or service shops, stores, and outlets with generally independent access and parking along or off street. Also, includes attached, multilevel, and often with limited-access, centralized parking such as shopping centers, malls, and office parks. Hospitals and other health facilities, fire, and police stations. Primary or secondary schools, universities, academies, libraries, museums, science centers, and aquariums.
	Recreation	Recreation parks, basic parks and complexes, and cemeteries	urc.pkc	Residential and city, mainly non-structural, little to modest development (confined mainly along access road), mostly open grass or forest land. Developed to highly developed theme or amusement parks, golf courses, and outdoor sports fields and complexes. Private or public place of interment.
	Transportation	Right-of-ways	utr.rws	Automotive – Major corridors (three or more single lanes)--freeways, highways, and beltways, or arterial streets. Include median, shoulder, and drainage adjacent to road boundary (fence line, if present). If two or fewer lanes, don't map. Railroad – Include tracks, bed, drainage, yards, station, outbuildings, and land to railroad boundary (fence line if present). Airline – Include runways, approaches, drainage, buildings, and land to the airport boundary (fence line, if present). Water(sea)ports – Include docks, boat ramps, and other buildings adjacent to the water but within the port boundary (fence line, if present). Utilities – For water, sewer, electrical, gas, oil, or other pipelines, with major right-of-way dimensions. Also include facilities for above (such as pump or sub-stations, treatment plants, and storage buildings to boundary (fence line, if present).

Land use and cover	Category	Subcategory	Code	Comments
	Industrial	Industrial construction, manufacturing, and waste management	uic.mix	Any facility used for the manufacture, production, processing or refinement of goods or raw materials including oil, plastic, glass, metals, cardboard, etc. Facilities used for processing or recycling clean or scrap materials. Also included in this category are light industrial parks that provide assembly, packaging, storage, and/or distribution of manufactured parts or goods.
	Undeveloped	Barren and vacant lands	uic.bvr	Urban commercial or residential either barren without buildings or vacant with abandoned buildings
AGRICULTURE	Aquaculture	Fish and other related aquaculture products	aaq.fsh	
	Berries	Berries other includes boysenberries and loganberries	abr.obl	
		Blackberries	abr.blk	
		Blueberries-tame and wild	abr.blu	
		Cranberries	abr.cra	
		Raspberries	abr.rsp	
		Strawberries	abr.stb	
		Unknown berries	abr.unk	
	Cover crops	Pasture	acc.pst	
		Field seeds, grass seeds, clover, hay other than alfalfa	acc.grs	
		Alfalfa hay	acc.alf	
	Fruits	Apples	aft.apl	
		Apricots	aft.apr	
		Avocados	aft.avc	
		Bananas	aft.bnu	
		Cherries	aft.cht	
		Citrus –all types	aft.cit	

Land use and cover	Category	Subcategory	Code	Comments
		Dates trees	aft.dts	
		Figs trees	aft.fgs	
		Grapes fresh	aft.gps	
		Guavas trees	aft.gvs	
		Mangoes	aft.mng	
		Nectarines	aft.nct	
		Olives	aft.olv	
		Papayas	aft.ppy	
		Passion fruit	aft.pfr	
		Peaches	aft.pch	
		Pears	aft.prs	
		Pineapples	aft.pnp	
		Plums and prunes	aft.plp	
		Pomegranates	aft.pmg	
		Kiwifruit	aft.kwf	
		Unknown fruit	aft.unk	
	Grains	Barley	agr.bar	
		Canola and possibly other rapeseed	agr.cnl	
		Flax	agr.flx	
		Millet proso	agr.mpr	
		Oats	agr.ots	
		Rice domestic	agr.rid	
		Rice wild	agr.riw	
		Rye	agr.rye	
		Safflower	agr.sfl	
		Sorghum	agr.srg	
		Sunflowers	agr.snf	
		Wheat	agr.wht	
		Unknown grain	agr.unk	
	Infrastructure	Farm residence or other farm-related structures	ain.mis	Farm-related structures including: houses, barns, silos or grain elevators; chemical storage areas, fuel tanks; or maintenance areas.
	Livestock-confined feeding operations	Cattle, beef	alv.lcb	
		Cattle, dairy	alv.lcd	
		Poultry, all types	alv.plt	
		Swine	alv.swn	
	Melons	Cantaloupes	aml.cnt	
		Melons - any other variety	aml.mum	
		Watermelons	aml.wtm	

Land use and cover	Category	Subcategory	Code	Comments
	Nursery and greenhouse, sod for sale	Unknown melons	aml.unk	
		Sod - grass farms	agh.sod	
		Green houses-including nursery, floriculture or mushrooms	agh.grh	
	Nonproductive	Abandoned agricultural land covered with native grasses, weeds or brush	anp.abn	
		Fallow, set-aside (CRP), recently tilled	anp.brn	
	Nut crops	Almonds	ant.alm	
		Filbert or hazelnuts	ant.nfh	
		Macadamia nuts	ant.nmc	
		Pecans	ant.npc	
		Pistachio	ant.nps	
		Walnuts	ant.nwl	
		Unknown nut	ant.unk	
	Row crops	Beans dry including kidney, lima, lentils, mung, pinto	arc.bdv	
		Corn field all varieties except sweet	arc.crf	For sweet corn, see vegetables.
		Cotton	arc.cot	
		Hops	arc.hop	
		Peanuts	arc.pnt	
		Peas - dry e.g. cowpeas, southern and other varieties	arc.psd	
		Potatoes, except sweet	arc.pto	
		Potatoes, sweet and yams	arc.pts	
		Soybeans	arc.syb	
		Sugar beets	arc.bts	

Land use and cover	Category	Subcategory	Code	Comments
		Sugarcane	arc.sgc	
		Tobacco	arc.tbc	
		Unknown row crop	arc.unk	
	Vegetables	Artichokes	avg.art	
		Asparagus	avg.asp	
		Beans fresh including green, lima or snap	avg.bns	
		Beets edible fresh or processed	avg.bte	
		Broccoli	avg.brc	
		Brussel sprouts	avg.bsp	
		Cabbage	avg.cbh	
		Carrots	avg.car	
		Cauliflower	avg.cal	
		Celery	avg.cel	
		Collards	avg.cld	
		Corn, sweet only	avg.crs	For other varieties, see row crops.
		Cucumbers and pickles	avg.ccp	
		Eggplant	avg.egg	
		Garlic	avg.grl	
		Lettuce - any variety	avg.ltw	
		Lotus root	avg.ltr	
		Mint	avg.mnt	
		Okra	avg.okr	
		Onions - dry any variety	avg.ond	
		Onions – green	avg.on	
		Parsley	avg.par	
		Peas – green	avg.pea	
		Peppers hot	avg.pph	
		Peppers sweet	avg.pps	
		Radishes	avg.rds	
		Spinach	avg.sph	
		Squash -all varieties	avg.sqd	
		Taro	avg.tar	
		Tomatoes	avg.tmt	
		Parsley	avg.par	

Land use and cover	Category	Subcategory	Code	Comments
		Unknown vegetable or herb	avg.unk	
MINING— ACTIVE OR ABANDON MINE AREAS	Resource Extraction Areas Or Points			
	Adit(s) or shaft(s),	Open, dry	min.aod	
		Open, partially or fully flooded	min.aff	
		Filled, collapsed or backfilled, dry	min.aof	
		Filled, collapsed or backfilled, partially or fully flooded	min.afd	
	Galleries and columns (room and pillar)	Open, dry	min.god	
		Open, partially or fully flooded	min.gof	
		Filled, collapsed or backfilled, dry	min.gcd	
		Filled, collapsed or backfilled, partially or fully flooded	min.gcf	
	Long – high wall	Intact	min.hwi	
		Collapsed	min.hwc	
	Long – low wall	Intact	min.lwi	
		Collapsed	min.lwc	
	Pit or quarry	Open, dry	min.pod	
		Open, partially or fully flooded	min.pof	
		Collapsed or backfilled, dry	min.pfd	
		Collapsed or backfilled, partially or fully flooded	min.pff	
	Strip or cut	Open, dry	min.sod	
		Open, partially or fully flooded	min.sof	
		Collapsed or backfilled, dry	min.sfd	

Land use and cover	Category	Subcategory	Code	Comments
		Collapsed or backfilled, partially or fully flooded	min.sff	
		Drift	min.drf	
	Borehole (natural gas or crude oil)	Dry at surface	min.bhd	
		Flooded at surface	min.bhf	
	Extracted Materials and Processing Areas			Earth material moved, or removed, visible at the land surface, and not undergoing reclamation.
	Resource stockpiles	None	min.rst	Includes not only stockpiles of a resource, such as coal, ore, gravel, stone, or block, but also storage facilities (e.g. tanks) for crude oil or natural gas
	Overburden	None	min.oum	Includes other unprocessed but disturbed material, that is removed to reach extractable resource, and dumped or deposited in piles or terraces
	Tailings	None	min.tpm	Includes processed materials that are dumped or deposited in piles or terraces
	Processing ponds treatment	Dry	min.ptd	
		Partially or fully flooded	min.ptf	
	Polishing	Dry	min.ppd	
		Partially or fully flooded	min.ppf	
	Sedimentation	Dry	min.psd	
		Partially or fully flooded	min.psf	
	Unknown usage	Dry	min.pud	
		Partially or fully flooded	min.puf	
	Mining Infrastructure Features			
	Buildings and structures	Operational	min.bso	
		Abandon	min.bsa	
	Refuse dump	Dry	min.rdd	
		Partially or fully flooded	min.rdf	
		Other	min.oth	
	Reclaimed land	None	min.rcm	