# **Built types**

#### Compact highrise

Dense mix of tall buildings to tens of stories. Few or no trees. Land cover mostly paved. Concrete, steel, stone, and glass construction materials.

# **Dense trees**



Heavily wooded landscape of deciduous and/or evergreen trees. Land cover mostly pervious (low plants). Zone function is natural forest, tree cultivation or urban park.

Land cover types

#### **Compact midrise**

Dense mix of midrise buildings (3–9 stories). Few or no trees. Land cover mostly paved. Stone, brick, tile, and concrete construction materials.

#### Scattered trees



Lightly wooded landscape of deciduous and/or evergreen trees. Land cover mostly pervious (low plants). Zone function is natural forest, tree cultivation, or urban park.

#### **Compact lowrise**



Dense mix of lowrise buildings (1-3 stories). Few or no trees. Land cover mostly paved. Stone, brick, tile, and concrete construction materials.

# Bush, scrub



Open arrangement of bushes, shrubs, and short, woody trees. Land cover mostly pervious (bare soil or sand). Zone function is natural scrubland or agriculture.

#### Open highrise



Open arrangement of tall buildings to tens of stories. Abundance of pervious land cover (low plants, trees). Concrete, steel, stone, and glass construction materials.

#### Low plants



Featureless landscape of grass or herbaceous plants/crops. Few or no trees. Zone function is natural grassland, agriculture, or urban park.

#### Open midrise



Open arrangement of midrise buildings (3–9) stories). Abundance of pervious land cover (low plants, scattered trees). Concrete, steel, stone, and glass construction materials.

#### Bare rock or paved



Featureless landscape of rock or paved cover. Few or no trees or plants. Zone function is natural desert (rock) or urban transportation.

#### **Open lowrise**



Open arrangement of lowrise buildings (1-3 stories). Abundance of pervious land cover (low plants, scattered trees). Wood, brick, stone, tile, and concrete construction materials.

#### Bare soil or sand



Featureless landscape of soil or sand cover. Few or no trees or plants. Zone function is natural desert or agriculture.

### Lightweight lowrise



Dense mix of single-story buildings. Few or no trees. Land cover mostly hard-packed. Lightweight construction materials (e.g., wood, thatch, corrugated metal).

#### Water



Large, open water bodies such as seas and lakes, or small bodies such as rivers, reservoirs, and lagoons.

#### Large lowrise

Sparsely built



Open arrangement of large lowrise buildings (1-3 stories). Few or no trees. Land cover mostly paved. Steel, concrete, metal, and stone construction materials.

Sparse arrangement of small or medium-sized

pervious land cover (low plants, scattered trees).

buildings in a natural setting. Abundance of

VARIABLE LAND COVER PROPERTIES

Variable or ephemeral land cover properties that change significantly with synoptic weather patterns, agricultural practices, and/or seasonal cycles.

b. bare trees

Leafless deciduous trees (e.g., winter). Increased sky view factor. Reduced albedo.

s. snow cover

Snow cover >10 cm in depth. Low admittance. High albedo.

d. dry ground

Parched soil. Low admittance. Large Bowen ratio. Increased albedo.

w. wet ground

Waterlogged soil. High admittance. Small Bowen ratio. Reduced albedo.





Lowrise and midrise industrial structures (towers, tanks, stacks). Few or no trees. Land cover mostly paved or hard-packed. Metal, steel, and concrete construction materials.

