Documents

1. Allan Report (Exhibit A01)
   Authored by DOGAMI
   Scientific overview of littoral cell

2. Foredune Management Plan (Exhibit A02)
   Document incorporated into updated policies

3. Comprehensive Plan Policies (Exhibit A03)
   Provides policies about what is and is not permitted

4. Zoning Ordinance Updates (Exhibit A04)
   Provides narrow parameters to evaluate individual projects
In order to better understand the changes in the volumes of sediment within the Cannon Beach cell, analyses have been undertaken of lidar collected in 1997, 1998, 2002, 2009 and 2016.

The Cannon Beach cell was divided into 10 discrete compartments and the volume of material present in each compartment and year determined. The authors used 1997 as the baseline on which to make comparisons against.

The authors focused on volume changes taking place above the 13 ft contour to the back edge of the dunes.

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Sand Transport

Figure 14. (Top) Calculated wind direction and sand-transport potential based on wind records measured at the Newport C-Man climate station. Wind bars indicate the direction from which the sand is blowing. (Bottom) Seasonal variability in the ability of northerly (122.5° about north) and southerly (337.5° about south) winds to transport sand.

How Much Material Will My Vehicle Hold?

- Up to 2 Yards or 2 Tons
- Up to 12 Yards or 15 Tons
- Up to 24 Yards or 30 Tons
- Up to 30 Yards or 30 Tons

Yards = Cubic Yards
1 Cubic Yard = 27 Cubic Feet
X 10,000 = 300,000

Or 500/YR or 10/wk
Criteria

The proposed Comprehensive Plan and Zoning Ordinance amendments are subject to the following criteria:

- Municipal Code section 17.86.070.A;
- Applicable policies in the Comprehensive Plan;
- Statewide Planning Goals, especially goal 18, Beaches and Dunes.

Municipal Code Section 17.86.070A

Before an amendment to the text of the ordinance codified in this title is approved, findings will be made that the following criteria are satisfied:

1. The amendment is consistent with the comprehensive plan;
2. The amendment will not adversely affect the ability of the city to satisfy land and water use needs.
Comprehensive Plan Policies

Areas of the plan discuss:
• Sand Dune Construction
• Foredune Management Policies
• Remedial Dune Grading

Foredune Management Plan:
• Management Areas
Statewide Planning Goals
Especially Goal 18, Beaches & Dunes

To conserve, protect, where appropriate develop, and where appropriate restore the resources and benefits of coastal beach and dune areas; and
To reduce the hazard to human life and property from natural or man-induced actions associated with these areas.

Policy & Procedural Questions
Document-based or
1. Allan Report
2. Foredune Management Plan
3. Comprehensive Plan Amendments
4. Zoning Ordinance Amendments

Topic-based
1. Grading for Views
2. Vegetation
3. Seasonality
4. Wildlife
5. Slope
6. Beach Access
7. Permitting
8. Mowing
9. Property-Values
Grading for Views

The Planning Commission recommends that the City Council carefully consider whether to allow dune grading for views at all, and that you adopt the accompanying Foredune Management Plan only to the extent that the Council decides to allow such grading activities.

PC Addendum to the City Council, November 29, 2018
Seasonality

FMP p.4

TIMING OF SAND REMOVAL

The 2018 Background report suggests that the best time for grading to occur is late spring/early summer and that there are challenges associated with the activity regardless of which time of year it occurs. The City of Cannon Beach collected public comment and the Planning Commission considered when is the best time of year to carry out this activity. After considering multiple factors, such as wind and wave patterns with the tourist season, the City determined grading may occur in April through June.

CBMC 17.42.060(A)3(j)

j. Revegetation of graded areas is mandatory. This can be accomplished with a combination of European Beach grass (A. arenaria); non-native American dune grass (A. breviligulata); the PNW native dune grass (E. mollis); or another revegetation plan approved by the Planning Commission. Graded areas shall be stabilized immediately after grading. Where immediate revegetation is not possible, or where revegetation fails, temporary erosion control measures shall be implemented until revegetation can be completed. Fire-resistant species are the preferred stabilizing vegetation within twenty-five feet of existing dwellings or structures, but fire-resistant vegetation shall only be planted when the foreslope and crest of the dune are adequately stabilized to prevent significant accumulation of windblown sand.

Wildlife

FMP p.3

The City of Cannon Beach will ensure that grading does not negatively impact wildlife, including razor clams. Evidence suggests that razor clams can have a survival rate of 100% for burial up to 12 cm (4.7 in) and a 70% survival rate when the burial depth on the beach is doubled to 24 cm (9.5 in). Any proposal for a grading project with a burial depth on the beach of more than 12 cm will not be approved by the City. The City encourages sand to stay within the foredune.
Slope

CBMC 17.42.060(A)3(c)

c4. Prescribe standards for redistribution of sand and temporary and permanent stabilization measures including the timing of these activities. Placement of sand on the beach may be permitted as part of a foredune grading permit if sand deposition does not exceed a depth of 24 inches. Placement of sand along the seaward face of the dune may be permitted as part of a foredune grading plan if the resulting slope is no steeper than 25-33 percent.

Beach Access

During the Planning Commission process residents brought up the question of increasing beach access near larger dunes. The Planning Commission determined the question was not relevant to what they were discussing.

If private parties are interested in creating additional beach access, they can create a proposal and work with the City and state through the appropriate permitting processes.
Permitting
CBMC 17.42.060(A)3(k)

k. Maintenance activities may include:

- additional plantings or fertilizer application in areas where plantings performed poorly,
- grading or sand removal to maintain access routes where accretion has occurred,
- foreslope shaping, and
- maintenance grading on the foredune crest as needed.

Maintenance activities during the first two years after foredune grading will generally consist of regular repair planting and fertilization. Monitoring and maintenance of dune and vegetation management projects are the responsibility of and are required of the applicant as a condition of permit approval.

Permitting
CBMC 17.42.060(A)11(c)

c. The cumulative volume of proposed grading, within an approved foredune grading management area, for which a conditional use permit was obtained, does not exceed two thousand five hundred cubic yards. (Example: In year one a permit is issued to grade seven hundred fifty cubic yards of material; one thousand seven hundred fifty cubic yards of potential additional volume remain for maintenance grading. In year three a permit is issued to grade one thousand cubic yards of material; seven hundred fifty cubic yards of potential additional volume remain for maintenance grading. In year four it is proposed that one thousand two hundred fifty cubic yards of material be graded. This grading cannot be accomplished by means of a permit for maintenance grading because the cumulative grading would be three thousand cubic yards, exceeding the maximum of two thousand five hundred cubic yards. A conditional use permit for foredune grading would be required to implement this additional one thousand two hundred fifty cubic yards of grading).
Mowing

FMP p.15

MAINTENANCE PROGRAM
This Maintenance Program identifies actions that can be or are required to be carried out to maintain the outcomes of dune grading and vegetation management processes. Regular maintenance will generally involve repair planting and fertilization and planting of secondary species in some areas. Maintenance may also involve foreslope shaping. Mowing is not permitted in the dune area. Provisions for access management are also included as part of general maintenance measures.

CBMC 17.42.060(A)6

6. Trimming of Stabilizing Vegetation.
   a. Mowing should occur between May and August.
   b. Mowing shall be done by hand or with a weed eater type machine. Grass should be cut as evenly as possible leaving six to eight inches of grass remaining above ground.
   c. Mowed grass shall be left in place as a mulch, unless determined to be a fire hazard by the Fire Marshal.
   d. If an area is mowed more than once, application of 21-0-0 ammonium sulfate fertilizer may be required.
   e. The foreslope area of the dune, the portion of the dune facing the beach, should not be mowed.

Property–Values

Planning Commission discussed the topic, but no amendments were made regarding the topic.
Click on Current Topics @ www.ci.cannon-beach.or.us
To access Foredune materials

Click on FMP Amendments
To access current list of Exhibits