

Biotops Area Ratio Application Guidance

1. Background and Objective

- Rapid urbanization, population increase and etc. cause concrete structures and artificial ground to increase, damaging natural and ecological functions in urban areas.
- Biotops Area Ratio system is introduced to reduce urban pollution and adapt to weather change like heat island and promote biological diversity in order to improve urban ecological soundness and build pleasant living environment.

2. Definitions of Terms

- “Biotops Area Ratio” means the ratio occupied by the land size with ecological function and natural cycling function out of the entire development area.
 - Present Biotops Area Ratio: Before development, Biotops Area Ratio measured based on land coverage type
 - Target Biotops Area Ratio: Biotops Area Ratio set as a target in strategy environment effect evaluation step after development
 - Planned Biotops Area Ratio : Biotops Area Ratio set for each land use purpose in environment effect evaluation step based on the Target Biotops Area Ratio
- “Natural ground green area” is artificially built green area on natural ground or embankment ground connected with the natural ground in the development target area including park green area stipulated in 「City Park and Green Area Act」.
 - Natural ground green area ratio : Natural ground green area ratio of the target development area
- “Land coverage map” means a map in which land surface physical conditions like forest, wetland, paved surface are classified and marked using the image captured by the artificial satellite

3. Subject of Application

- 「Environmental Impact Assessment Act」 Article 9-1, Strategy Environment Evaluation Target Plan, one of followings;
 - Above Act's Enforcement Order Article 7-2, Appendix 2-2. Basic Development Plans; 가. city development; 나. Industry location, industrial district construction; 카. tourist complex

development; 파. Specific area development; 하. Sports facility installation; 거. Waste, human and livestock waste processing facility installation

- 「Environmental Impact Assessment Act」 Article 22-1, Target projects of Environmental Effect Evaluation, one of following projects;
 - Above Act's Enforcement Order Article 31-2, Appendix 3, Target Projects; 1. city development project; 2. Industry location, industrial district construction project; 3. tourist complex development project, 13. Specific area development project, 14. Sports facility installation project, 거. Waste, human and livestock waste processing facility installation
 - * Specific target plan and target project shall follow the Environmental Effect Evaluation Act, Enforcement Order Appendix 2(Strategy Environment Effect Evaluation Target Plan) and Appendix 3(Environment Effect Evaluation Target Project).

4. Biotops Area Ratio Application Standard

| Development project type | Recommended goal | Specific description |
|---|------------------|---|
| 1. City development | 30 | Old urban development project |
| | 40 | Development projects outside the old town |
| 2. Industry location and industrial district construction | 20 | - |
| 3. Tourist district development | 60 | - |
| 4. Specific locality development | 20~60 | Standard application for each Development project type |
| 5. Sports facility installation | 80 | General sports facility(outdoor) |
| | 50 | Bicycle and motorboat facility(indoor) |
| 6. Waste and human waste processing facility installation | 50 | Reclamation facility |
| | 40 | Incineration facility and human waste processing facility |

5. Each Biotops Area Ratio Setting

- Present Biotops Area Ratio
 - Based on the land coverage map of the project area, calculating the area of each type and multiplying weighted value and calculating present Biotops Area Ratio
- Target Biotops Area Ratio
 - Based on Present Biotops Area Ratio, setting Target Biotops Area Ratio considering goals to achieve for each development project type
 - Natural ground green land which is the most important habitat for living creatures is planned to

maximize its area considering present situation and land use status

- Planned Biotops Area Ratio
 - Planned Biotops Area Ratio should be set based on the Target Biotops Area Ratio and the project should be planned to achieve the Planned Biotops Area Ratio.
 - In order to achieve the Planned Biotops Area Ratio, maximize the natural ground and apply various ecological space types like artificial ground green area which should be reflected to the project.
 - * Planned Biotops Area Ratio should be calculated for each district with discretion(0~100%) within the range conforming to the Target Biotops Area Ratio considering land use plan and natural ground green land ratio and it should be set to minimize damage to the natural ground.

6. The Plans Under Environmental Effect Evaluation

- Related administrative authorities and project operators should calculate Present Biotops Area Ratio based on the land coverage type of target development area and set and suggest Target Biotops Area Ratio for each special purpose land.
- Related authorities should consult Target Biotops Area Ratio based on Present Biotops Area Ratio suggested by related administrative authorities and project operators considering project plan, environmental characteristics and goals to achieve and they should suggest it as their comments.
- Approval authorities should reflect Target Biotops Area Ratio to business plan for approval.

7. The Projects Under Environmental Effect Evaluation

- Related administrative authorities and project operators set and suggest Planned Biotops Area Ratio based on Target Biotops Area Ratio.
 - Planned Biotops Area Ratio is calculated by segment special purpose area under the land use plan or each block's Biotops Area Ratio.(Refer to Preparation Form)
 - * When getting Environmental Effect Evaluation without Strategy Environmental Effect Evaluation, calculate present Biotops Area Ratio and set and suggest Planned Biotops Area Ratio
- Related authorities should consult Planned Biotops Area Ratio based on Target Biotops Area Ratio suggested by related administrative authorities and project operators considering project plan, environmental characteristics and goals to achieve and they should suggest it as their comments.
- Approval authorities should reflect Planned Biotops Area Ratio to business plan for approval.

- In case that the consultation result on Biotops Area Ratio changed, related administrative authorities and project operators should specify the reason and listen to the related authorities comments to reset Biotops Area Ratio.

Source: The Ministry of Environment (www.me.go.kr)