

Draft - Institutional Design Principles for Studying Urban Patches as Commons, 2/9/21 - Draft

Initial thoughts by BUFRG team on to consider Ostrom's Institutional Design Principles (IDP's) for Natural Commons as a tool to study 'Urban Forest Patches.' Reference cited include the following: Professor Marco Janssen's Ostrom Workshop Colloquium paper <https://ostromworkshop.indiana.edu/pdf/seriespapers/2021spr-colloq/janssen.pdf> and presentation (2/1/21) and Dane Whittaker's "Coordinating Collective Action: Why Lake Organizations are Like Cookouts" <https://vclra.org/2020/12/16/coordinating-collective-action-why-lake-organizations-are-like>. The papers explore Social-Ecological-System (SES) fit and the validity and generalizability of Ostrom's 8 institutional design principles (IDP) for Lake Organizations. Format of the list below for adaption for urban forest (UF) patches – Formal IDP from Ostrom's work/*IDP Adapted by Whittaker for Lake Organizations & modified for UF Fischer patches*/Draft UF patch notes:

- 1) **Clearly Defined Boundaries** take into account two distinct attributes (physical boundaries and rules governing use). First, the physical boundaries of the resource must be clear; this is inherent for a patch – the outer boundary &/or forest edge, but must remember that the patch boundaries may have changed over time. Second, who can use the patch must be clear. This probably revolves around ownership mostly, but there might be other considerations. And, do owners understand their boundary limits and limitations to exclude others?
- 2) **Congruence between Appropriation and Provision Rules and Local Conditions/*The rules fit the patch.*** Public owned patches have rules (formal and informal), while other patches rely on either formal rules regarding trespass or informal "neighborhood" rules.
- 3) **Collective Choice Arrangements/*patch users participate in setting rules.*** Because people who interact with a patch (i.e. parks) regularly have a good sense of the local conditions and needs, they can help design rules and forest appreciation programs that fit local conditions. Members of a "Friends Group" of a forest patch/park may be able to have their voice heard through the organization. Very local neighborhood patches generally have informal rules – everyone knows the right and wrong things to do, but a new neighbor might have to be "educated", not knowing what is expected in terms of use, etc., for both a local 'park' or a privately owned parcel that's open for local use
- 4) **Monitoring/*Monitoring the patch and its use*** to detect harmful changes that need to be addressed. Monitoring can be formalized through programs like invasive species monitoring (i.e. Monroe County – Identify and Reduce Invasive Species (MC-IRIS)), trash pickup days, etc. It can also be informal. A hiker might notice a new plant growing in the patch and report it to a local invasive species specialist for identification and, if confirmed, rapid response management.
- 5) **Graduated Sanctions/*Graduated sanctions by other patch users.*** Sanctioning is when a rule-breaker is punished. Graduated sanctions say that the punishment's severity is based on the seriousness of the rule broken and whether the person has broken the rule before. For example, someone digging up native plants might not know it is illegal, when they are reported by a hiker to a local authority. Graduated sanctions give the rule-breaker the benefit of the doubt, and a chance to learn the rules. B'ton City P&R might have a complaint process?
- 6) **Conflict-Resolution Mechanisms/*Simple, low-cost conflict resolution mechanisms.*** Is there an easy way for patch users to resolve disputes? This could be as simple as a discussion or at a "Friends" organization meeting. But, suppose the case is more complex, like a water level dispute between neighbors as do the actual boundary lines or who should pick up trash, etc. .
- 7) **Minimal Recognition of Rights to Organize/*Rights to organize.*** In some places, this is a challenge. For a "Friends Group" state law gives people the right to organize. What may present a more significant challenge is gaining permission from County/Township governments or state agencies to take specific actions. The Dunn's Woods "Save the Forest" efforts are a unique local example, not sure of others?
- 8) **Nested Enterprises/*Organizations work together at different scales.*** Best examples at the local level would public patches, there could be multiple players – the city (several dept's possible), non-profits, NH Associations, other informal citizen groups.

Note: Do the IDP's only matter at the margins of UF patch sustainability? For example, think of what might lead to the initiation of a new organization to protect a patch from - AIS introduction, miss or over use, etc.