

# Regenerative Urbanism

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## *a brief introduction and bibliography*

### Introduction

Regenerative urbanism and regenerative urban (and regional) planning are a “work in progress.” Thus, pursuing them requires being open to questioning what we know, don’t know, and how we know. Similarly, it requires a willingness to hold the accompanying anxiety and “tension” of the creative process as we co-develop new next-step understandings, approaches, and applications in a process of experimentation and innovation. It is one name for the theme of an integrative living systems practice that is emerging from/in the uncoordinated innovation across our planning, design, and build professions. They can usefully be understood as humanity’s next big sustainability step to success within the limited time remaining for an effective response. A step that fuses the human economy and nature (natural systems) in a co-evolutionary symbiosis through the maintenance, regeneration, and growth of the built environment (e.g., city administration, planning, design, and engineering). That fusion is the vehicle to create the necessary material capacity and basis for inter-generational inclusive perpetual prosperity and community well-being of a sustainable global society in the biosphere.

Pursuing regenerative urbanism requires working with the leading edge of applicable concepts and tools and embracing the innovation required for the next increment of sustainability and sustainability success within the limited time remaining. It requires working first at a strategic level and then at an applied level. It requires formulating a short-thru-long-run program of problem solving to design a sustainable future, of which a key component is a global network of regenerative places (buildings, districts, cities & regions) that integrate what’s possible in the short run, with the biggest moves possible in the medium and long run, including the innovation, rule changing, etc. Formulating this program is guided by a definitive set of performance principles and imperatives that define ultimate sustainability operationally, even as the particular technology and configurations of solutions will necessarily change over time.

This Bibliography and introduction provides a short overview of key foundational concepts and literature (although not purporting to be a fully “definitive” list). The literature on a regenerative approach to design is more developed than that of planning. On the design side, one of the primary foundations is John Lyle’s *Regenerative Design for Sustainable Development* (1994); another one is Sym Van der Ryn’s *Ecological Design* (1996). A burst of creativity has advanced the field recently (2012+; see Resources Nos. 11 & 12; google “regenerative development;” and see recent introduction and synthesis at Resource No. 15). The term and the concept have been at the heart of what is known as the Ecological City theme in planning theory, history, and practice, and accessibly developed by Edward Jepson, PhD (*How Possible is Sustainable Urban Development* (2010; Resource No. 7). However, Buckminster Fuller and others have been working with this theme as the heart of authentic sustainability since at least the mid-20th century. The first environmental movement of the mid-1960s began “mainstreaming” the idea of applying ecosystem principles to human systems design and public policy. This thread of thinking and

work ultimately spawned the set of UN and related conferences that led to the 1987 Brundtland Report (integrating environment & economy into sustainable development), the 1992 UN Environmental Summit in Rio, the world's new Sustainable Development Goals (SDGs) and the current Habitat 3 with its New Urban Agenda in Quito (October 2016).

Yet, these formulations fall short of an accurate and operational comprehension of the required ultimate sustainability imperatives and how to achieve them (again, a work in progress). The modern (21st century) embrace of the concept “dances” around the adjective “living” as a synonym without fully naming it: The International Living Future Institute (home of the Living Building Challenge, the Living Community Challenge), the Cities Alive Conferences, living infrastructure, One Planet, etc.. Yet, the central concept is the same – the miracle of self-organizing regenerative living (life support) systems (and economy!). This concept has been common over the trajectory of its development. Yet, it has become more nuanced as understanding has developed over time (see “Living Systems Theory” in Wikipedia), and been “mainstreamed” into engineering, design, and planning curriculums. As a result, professional service offerings, configurations, and applications have become better, workable, sophisticated, routine, and scaled (witness the SF Transit Center Park—creating an ecosystem out of concrete, etc.). The Stanford Engineering’s Sustainable Urban Systems Initiative is recent case in point ([Link1](#), [Link2](#)). Add sustainable systems leadership and the design school

The following necessarily incomplete bibliography illuminates key resources in this emerging arena of important and meaningful innovation and practice that will ultimately develop into a body of knowledge and practice for regenerative urbanism and sustainability success within the limited time remaining to mount an effective response. This will require us to pursue exploratory regenerative city-region assessments to take next steps forward in this innovation thread and specifically focused on understanding and formulating specific beginning programs of work that shift our current development trajectory from business-as-usual, net negative, ad-hoc greening to the needed net positive regenerative systems performance of sustainability, and inclusive prosperity and community well-being.

### Selected “Starting” References – Regenerative Urbanism

These & All Articles below and some more are in this dropbox folder if you want to browse:

[https://www.dropbox.com/sh/cmlnheby1muse0c/AAC\\_c1YOgeRlz0T6WySR-nY0a?dl=0](https://www.dropbox.com/sh/cmlnheby1muse0c/AAC_c1YOgeRlz0T6WySR-nY0a?dl=0)

1. **American Planning Association, Sustainable Communities Division, Living Communities Webinar** SF Planning (SF Planning & International Living Future Institute): <https://apascd.wordpress.com/webinar-archives/> (page down to Webinar No. 9).
2. **American Planning Association Conference 2016 Session Presentation -- Regenerative Urbanism Rising: Platform for Next-Generation Practice**, Scott Edmondson, SF Planning, et. Al.
  - a. Description (1 para) & Links (copied below too): <https://apascd.wordpress.com/webinar-archives/>
  - b. Pres PDF: [http://www.ohioplanning.org/aws/APAOH/asset\\_manager/get\\_file/132050?ver=65](http://www.ohioplanning.org/aws/APAOH/asset_manager/get_file/132050?ver=65)
  - c. Vid Recording (1 hr pres: 20 min framing, 20 min IUS, 20 min district sust des): <https://www.youtube.com/watch?v=uJ9179bl7fc>
3. **The Challenge of Sustainability Planning--State APA Chapters and the New APA Sustainable Communities Division**, Scott Edmondson, American Planning Association Sustainable Communities Division Newsletter., [https://www.dropbox.com/s/m2soag61sh4utna/ChallOfSustPlng%28ste-2013\\_6ppONLY%29.pdf?dl=0](https://www.dropbox.com/s/m2soag61sh4utna/ChallOfSustPlng%28ste-2013_6ppONLY%29.pdf?dl=0)

4. **Environmental Stewardship – Building Across Scales** – ZGF Architect’s approach to urban planning and designing regenerative high performance places: <https://www.dropbox.com/s/w1bcnglffnpzp4m/ZGF-EnvStwrd-BldngXssScales.pdf?dl=0>
5. **Ecological Plumbing** (classic 2 page framing of challenge and planning/design response, 1999): [https://www.dropbox.com/s/89vs78b9elrxy8d/1a1\\_Ecological\\_Plumbing.pdf?dl=0](https://www.dropbox.com/s/89vs78b9elrxy8d/1a1_Ecological_Plumbing.pdf?dl=0)
6. **Jepson, How Possible is Sustainable Urban Development** (not too long, good intro to topic and anchor in planning theory and practice: (about 17 pp): [https://www.dropbox.com/s/35x9otxmitsef7b/1a2\\_Jepson\\_HowPossSD.pdf?dl=0](https://www.dropbox.com/s/35x9otxmitsef7b/1a2_Jepson_HowPossSD.pdf?dl=0)
7. **Living Community Patterns – Exploration of Sustainability Strategies for SF** (ILFI/SF Planning). Skim/Read methods discussion, pp 5-12 in particular. [https://www.dropbox.com/s/m4rct0fnfvr8k5/LivingCommunitiesSanFrancisco\\_Final\\_sm.pdf?dl=0](https://www.dropbox.com/s/m4rct0fnfvr8k5/LivingCommunitiesSanFrancisco_Final_sm.pdf?dl=0)
8. **Waldron, David, et. al., UBC Regen Neighborhood Report** (Skim only; read Intro 10 pp): [https://www.dropbox.com/s/3o3smpbjzyw0yj2/1a5a\\_WaldronD\\_Regenerative%20Neighbourhoods\\_potential%20and%20practicalities%28e-copy%29.pdf?dl=0](https://www.dropbox.com/s/3o3smpbjzyw0yj2/1a5a_WaldronD_Regenerative%20Neighbourhoods_potential%20and%20practicalities%28e-copy%29.pdf?dl=0)
9. **Amy Oliver, et. al: Barcelona Pres/article: How to understand net positive neighborhoods – 3 perspectives** (very good lit synthesis/summary, 5 pp)): [https://www.dropbox.com/s/dnvu94qzalmsr18/1a6\\_NetPositiveNghbrhds\\_AmyOliverPresBarcelona%29.pdf?dl=0](https://www.dropbox.com/s/dnvu94qzalmsr18/1a6_NetPositiveNghbrhds_AmyOliverPresBarcelona%29.pdf?dl=0)
10. **Papers, Special Issue, Building Research & Information Journal, edition on regenerative design** from 2012: <https://www.dropbox.com/sh/geg7y73f5db5n6e/AAB-2xS4vpBliArUG4dgKTzVa?dl=0>
11. **Theoretical Underpinnings of Regenerative Sustainability, Building Research & Information**, Robinson, John, Raymond J. Cole, 2015: <https://www.dropbox.com/s/ww5960b9ksvgith/TheoryUnderpinsRegenSust.pdf?dl=0>
12. **Towards the Amsterdam Circular Economy**, City of Amsterdam, [https://www.dropbox.com/s/zt333tf64jo1rsx/towards\\_the\\_amsterdam\\_circular\\_economy\\_web.pdf?dl=0](https://www.dropbox.com/s/zt333tf64jo1rsx/towards_the_amsterdam_circular_economy_web.pdf?dl=0)
13. **Regenerative Urbanism—The Meaning, Challenge, and Promise**, Sustainable Community Planning Newsletter, American Planning Association Sustainable Communities Division, Spring 2018, p. 8.
  - a. Summary (300 words) ([click](#)).
  - b. Summary (4 pages) ([click](#)).
14. **Regenerative Development & Design: A Framework for Evolving Sustainability**, Mang, Pamela, Ben Haggard, Regeneration, Wiley, 2016. An exceptional summary, synthesis, and introductory text to a leading edge, a co-evolutionary citizen-designer-enabling approach that designs processes to define projects reflecting the character, spirit, and authentic need of the place and the people, and to develop simultaneously the co-evolutionary, regenerative design and development capacity of the stakeholders.
15. **Lyle, John Tillman, Design for Human Ecosystems – Landscape, Land Use, and Natural Resources**, Island Press, 1999. AND, **Regenerative Design for Sustainable Development**, John, Wiley & Sons, Inc., 1994.
16. **Matson, Pamela and William C. Clark & Krister Andersson, Pursuing Sustainability--A Guide to the Science and Practice**, Princeton University Press, 2016. An excellent synthesis of academia’s approach, theory, and its interrelationship with the UN’s SDGs and Habitat III New Urban Agenda. The Stanford program by the same name and for educating leaders for the transition to sustainability is here, along with description and related resources: <https://pursuing-sustainability.stanford.edu/>.
17. **The Natural Step (TNS)**, is a and non-profit sustainability systems accelerator with a powerful first-order sustainability approach, <https://thenaturalstep.org/approach/>, that is in a class of its own.
18. **The Biophilic City Network**, the collaborative initiative of academics, practitioners, and cities that are advancing the application of biophilia to urban planning and design (<https://www.biophiliccities.org/>).